FINANCING THE LIVESTOCK INDUSTRY

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THE INSTITUTE OF ECONOMICS
INVESTIGATIONS IN AGRICULTURAL ECONOMICS

FINANCING THE LIVESTOCK INDUSTRY

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FINANCING THE LIVESTOCK INDUSTRY

BY

FORREST M. LARMER

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DIRECTOR'S PREFACE

In a previous publication [1] the Institute of Economics has presented a critical examination of the innovations introduced into our financial system by the passage of the Agricultural Credits Act of 1923. It was there briefly pointed out that, while the Intermediate Credit system was especially intended to serve the financial needs of agriculture in general, it was, in fact, adapted to the peculiar needs of the livestock industry.[2] It was, of course, impossible in that volume to discuss fully the significance of the Intermediate Credit system for any particular branch of agriculture such as the livestock industry.

In the present volume we are able to go much more deeply into this particular phase of agricultural finance. Not merely do we present a much more detailed discussion of those livestock financing needs which might be met by the Intermediate Credit Banks and the agricultural credit corporations, but also round out this specific discussion by extended examination of the whole financial machinery of the cattle and sheep industries. In working this out, an attempt has been made to supple-

[1] *The Federal Intermediate Credit System*, by Claude L. Benner.

[2] *Ibid.*, pp. 269 ff.

43629

ment the most careful academic method of analysis with voluminous and intimate factual material drawn from practical contact with the industry itself. A word of explanation as to our procedure is therefore desirable.

About ten years ago Mr. Forrest Larmer, then a graduate student at the University of Chicago, prepared the first extended discussion of the structure and functioning of the livestock loan company to appear in print. Within a few years his articles attracted the attention of a cattle loan company which was anxious to include in its personnel some one who had made a serious study of the economics of the business. In this manner Mr. Larmer became actively identified with the business of livestock financing and has had a wealth of first-hand experience during a period of some eight years, which have been peculiarly significant and stimulating—as well as trying—to anyone thoughtfully concerned in the nature and welfare of the business.

In January, 1925, under the auspices of the Institute of Economics, Mr. Larmer began to reduce his observations and experience to written form. In accordance with our plan of organization and methods of work, he has had at his disposal the aid of all other members of the staff who might be in a position to offer criticism or to supplement his own resources. To the closing chapters of the book in particular Mr. Nourse and Mr. Moulton have contributed quite freely, the one approaching the

matter from the point of view of the student of agricultural economics in general and the other as a student of financial organization and banking practice. The joint conclusions thus reached have been submitted not only to other members of the staff of the Institute but to numerous persons connected with the livestock industry or with various financial agencies which specialize in livestock financing. We believe, therefore, that this important problem has been treated with a combination of theoretical analysis and practical experience which should commend the conclusions to serious consideration.

HAROLD G. MOULTON,
Director.

Institute of Economics,
July, 1926.

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Besides his deep obligation to E. G. Nourse, H. G. Moulton, and other members of the staff of the Institute of Economics, the writer desires to acknowledge the valuable help which he has received through extensive interviews and correspondence with persons actively connected with the livestock industry and livestock financing, particularly the following: Leon Goodman and H. A. Wallace, Des Moines, Iowa; John Clay, Alan F. Wilson, M. D. Goldberg, and James C. Poole, all of Chicago; Wirt Wright, Evanston, Illinois; I. A. Vant, St. Joseph, Missouri; M. L. McClure, Chairman of the Board of the Federal Reserve Bank of Kansas City; J. F. Ebersole and others of the Federal Reserve Bank of Minneapolis; J. C. Swift and Nelson Broadus of Kansas City; S. G. Smith and R. H. Macon, St. Louis; John Sparks, W. E. Connell, and E. B. Spiller, Fort Worth, Texas; H. C. Harding, Amarillo, Texas; Elkin Brothers, Midland, Texas; H. W. Farr, Greeley, Colorado; T. W. Tomlinson, Denver, Colorado; and L. O. Challman, Cheyenne, Wyoming.

The writer is also indebted to the management of the Federal Intermediate Credit Banks of Omaha,

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However, none of the persons mentioned who are not connected with the Institute of Economics is in any way to be held responsible for the conclusions expressed in the book.

FORREST M. LARMER.

Washington, D. C.,
July, 1926.

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FINANCING
THE LIVESTOCK INDUSTRY

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INTRODUCTION

Pioneering across the continent, the livestock industry traveled in easy stages, since Colonial beginnings in the seventeenth century, three thousand miles westward till it reached the Pacific. Always just in advance of the oncoming settlers with their implements of agriculture, it has been the expression of a life of freedom and adventure. Even the imagination of the stay-at-home capitalists of the Old World was caught by this picturesque industry, and in the heyday of our trans-Mississippi development scores of Scotch and English "pastoral companies" were formed to operate in America. On the vast unclaimed open prairies west of the Mississippi the business developed spectacularly and made fortunes for many of its followers. These successes, however, were due largely to the bounteousness of nature. Methods were crude; system and management were preceded by chance and fortitude. The cost of the herd or flock was small and expenses of operation almost negligible, except for the death toll that Nature exacted.

Then came a time toward the close of the nineteenth century when the limits to expansion appeared. No longer could cattle and sheep men push on another step into great areas of unused pastoral land. The bounds of the range country had been reached. At the same time, slowly but surely the settler and agriculture began to creep into what had been the exclusive domain of cattle and sheep. The boundary lines between the pastoral and the agricultural empire began to disappear. The two systems began to overlap and then to blend.

This transition brought with it new and serious problems. Costs of production advanced. The investment required for a herd or flock increased many fold. Financial problems came and grew with the increasing complexities of the business. There were credit upheavals and disasters in the eighties, in the nineties, in 1908. The livestock producer found himself involved in a more and more complex national economic structure with its increasingly intricate workings. But while the problems of the rancher and farmer grew constantly more difficult, the development of new methods and new economic institutions to meet this changed situation did not proceed at equal pace. Bluff and forceful cattle barons hugged close the traditions of the past, while the lesser gentry of the sheep and cattle industry were prone to "muddle through" along with the leaders. No one appeared to have the vision and courage to initiate decisive and well-considered

measures for the more effective economic and financial organization of the industry as a whole. Or at least, as commonly happens in such matters, such constructive leadership could not be made effective over the rank and file.

This was the situation in 1914, though some advance in prices had brought a general increase of prosperity except in such regions as were suffering from drought. Then for a time the World War gave respite from the problem, bringing in a six-year period of tremendous but erratic and ill-established prosperity such as revived or even outdid the pioneer tradition. In the fall of 1920 this war-born boom gave way in turn to a period of black disaster, which is forcing the industry at length to face more frankly and, let us hope, constructively the fundamentals of its problem.

At the present time the livestock industry is in an important transition period. An economic cataclysm of unprecedented seriousness has just swept over it. Changes are in order. It is now to be determined whether the production of livestock can be made a stable part of our economic life, functioning in an orderly manner, or whether it will continue to go haphazardly toward an uncertain goal.

During the last few years the livestock industry has forced upon legislative and administrative attention the fact that there is here a vitally important problem. From time to time some legislative meas-

ures of importance have been enacted. Late in 1924 the seriousness and urgency of the agricultural problem was recognized by the President, and an Agricultural Commission composed of nine representative men from the agricultural field was appointed. That special importance was, at the time, attached to the livestock question was emphasized by the fact that five members of the Commission were more or less definitely connected with, or specially informed concerning, various phases of the livestock industry. The first report of the Commission, which was presented to the President in January, 1925, related entirely to the livestock problem and recommended some specific measures intended for its relief. A part of the recommendations of this Commission was adopted; and on October 17, 1925, the chairman of the Commission, Robert D. Carey, wrote the President stating that in the judgment of the Commission it was not necessary that it be called again into session. Thereupon it was immediately dissolved by action of the chief executive.

The dissolution of this Commission and events of a similar nature in the latter part of 1925 tended to spread the opinion that the cattle industry, which alone of the three great divisions of the livestock industry had remained in distress, had finally risen to its feet and galloped away to fields of certain prosperity. Whether in fact the producers of cattle, sheep, and hogs have really solved their problems

has been given but little thought by most people. A very considerable portion of the people in the United States today are wont to think that the livestock problem has passed. The industry is very imperfectly understood, and the public has been deceived by the fact that production has continued with no apparent halt. The public fails to understand that in an agricultural industry, unlike most branches of manufacturing, for example, serious demoralization does not involve prompt curtailment of output. The livestock breeder cannot "close up shop" and wait until an emergency is past. The very nature and essence of his work lies in its continuity. Without doubt, the public generally has a better grasp of industrial problems than it has of the problems of agriculture.

The importance of the livestock industry in the entire economic life of the nation is such that it merits the most careful consideration. With the tremendous industrial development of our country, there comes a danger that we may underestimate or overlook the great part which agricultural prosperity still plays in the economic welfare of the country as a whole. President Coolidge in addressing livestock interests in 1924 admirably sounded this note of warning when he said: [1] "Our country must not be given entirely to industrial development. It must keep a well-rounded-out, complete,

[1] Address at the International Livestock Exposition, Chicago, December 4, 1924.

and independent existence. A country without agriculture is shorn of half its strength and is necessarily vulnerable. . . . The key to successful agriculture has always been its flocks and herds. . . . When I was a boy in Vermont, a farm was described not as containing 60 acres, or 80 acres, or 100 acres, but as a 10-cow farm or a 20-cow farm or a 30-cow farm. The real gage of the land's productiveness and the farmer's capability was much more intimately related to the number of cows than to the number of acres."

The great national importance of this industry depends not alone on the numbers engaged in the actual production of livestock, but also on those in the packing and distributing of meat, and in the manufacture of livestock by-products. Over a billion dollars is invested in packing plants alone. More than 11 per cent of our entire national income is from livestock and livestock products. Between five and six million dollars is paid daily for livestock at the various stockyard centers of the country.

Demoralization in the industry not merely reaches forward to the packing business and all its by-product lines; it reaches backward also to those vast agricultural enterprises which exist for the production of feedstuffs—alfalfa and other hay crops; corn, barley, rye, and minor cereals; cottonseed-cake, molasses, mill-feeds, and other concentrates. Moreover, the railroads that carry livestock out of the producing territory are concerned also in having a

large tonnage of goods to haul back for sale and consumption in these sections, and the manufacturer who makes these clothes, building materials, furniture, and what-not joins with the railroad official and stockholder in their desire to secure and maintain prosperity and buying power in the great livestock country of the mid-West, Southwest, Mountain States, and Pacific Coast. In all the region where livestock is a major source of revenue, stores, banks, and the whole commercial fabric depend upon the stable organization and sound operation of the livestock business.

The consumer's interest is also involved. Since most people esteem a good beefsteak or a juicy chop more highly than the anæmic menu of the vegetarian, the general public is more vitally concerned than it commonly realizes in the basic prosperity of the livestock industry. Because meat and livestock products have been abundant and well within the reach of the workers' pay envelopes during the last few years, consumers have been permitted to ignore the fact that such conditions cannot be maintained by an industry unless it has achieved both efficiency and economic stability.

Cattle production has always depended to an exceptional degree upon credit. In part this is due to peculiarities of the industry itself and in part to historic reasons. Under pioneer conditions the demand for expansion continuously outran the resources of operators themselves, and the profitable-

ness of the business, in spite of its speculative character, caused it to attract capital in large amounts and from distant sources. The dependence of marketing and slaughtering agencies upon the product of the range for the prosperity and expansion of their business made them particularly ready to assist in providing ample credit for its operation. Naturally it is a slow process for the members of an industry thus organized to shift to a basis of less dependence upon outside credit resources and to undertake the accumulation of a larger equity in their own business. This is rendered particularly difficult in the case of our livestock industry at the present time by reason of the large amount of capital which has been lost by operators during the unprosperous years through which we have just been passing, added to the fact that the present level of prices still maintains the capital needs of the industry at a point much above its pre-war level.

It seems certain, therefore, that we must, for the present at least, look upon the livestock branch of our agricultural industry as one in which a very large proportion of outside funds will be called for to supplement the capital resources of the operators themselves. Owing both to the hazards of the cattle and sheep industries and to the fact that they embrace many areas remote from financial centers and sparse of population, the costs of financing are likely to be at best rather high. Hence the most effective and economical financing of our livestock

industry will continue to present problems of considerable magnitude and complexity.

While this applies primarily to the range industry, it is also true that the business of feeding cattle and sheep has been to an exceptional degree carried on with borrowed funds. The general farmer has been disposed to supply his own fixed and working capital for the production of at least the larger part of his field crops and farm livestock. In order to make more profitable utilization of this plant and his surplus feeds, he has needed periodically to purchase raw material in the form of feeder cattle, sheep, or occasionally hogs. For the financing of this outlay, which is rather heavy in proportion to his own resources and creates a peak load for capital during a relatively small part of the year, he has naturally depended on outside sources. The feeder business as such thereby is rendered perhaps as dependent upon credit as is the range industry, but it represents a distinctly smaller part of the total business of the given section. In other words, the credit operations rest upon a much broader equity of the producers in the business as a whole.

It is the purpose of the present volume to analyze the situation with reference to livestock finance with three general purposes in view: (1) to outline the evolution of the livestock industry, with minor emphasis on its technical processes and major stress on the economic organization to which it has given

rise; (2) to point out the manner in which the industry has been financed during its several stages and the manner in which general and special credit institutions have functioned in this field; and (3) to analyze the present situation and its needs in terms both of a more suitable economic organization and of more adequate and permanent provision for the peculiar needs of livestock financing as an integral part of the credit structure of the nation. In presenting this story in its historical perspective it has seemed desirable to develop first an account of the general evolution up to the time of our entry into the World War, followed by a more detailed examination of the disturbing influences of the years from 1917 forward. On this basis of fact and interpretation, the five chapters of Part II offer suggestions for a constructive program.

The goal in view is such a co-ordination of better economic organization and better financing service as to eliminate so far as possible the wide swings from the extreme of prosperity to the depths of depression. The book does not argue for artificial support of livestock production for its own sake nor in any particular magnitude. At the same time it proceeds on the assumption that the United States will continue to depend upon a home industry for the domestic meat supply and to direct its energies toward improving the economy and efficiency of this branch of its agriculture rather than to seek

at the present time for some possibly cheaper source of meat supplies elsewhere. If so, this domestic industry needs to be put upon an economically sound and permanent basis, stabilized as far as is possible through soundly conceived and ably administered financial institutions.

PART I

THE BACKGROUND OF THE PRESENT PROBLEM

CHAPTER I

THE EVOLUTION OF THE LIVESTOCK INDUSTRY IN THE UNITED STATES PRIOR TO THE GREAT WAR

If one is to have an adequate understanding of the present situation and difficulties of the livestock industry, it is necessary to see the steps through which it has passed. The discussion will begin, therefore, with a retrospective account, dealing with, (1) the size and growth of the industry, (2) areas of production, (3) technical aspects of the industry, and (4) economic considerations in its organization and operation.

Such an account cannot deal with livestock as a whole, since the production of the different species is to a considerable degree specialized. Convenience requires that treatment be given separately to cattle, sheep, and hogs. However, since the special problem of financing to which this book is addressed is practically limited to cattle and sheep, the hog industry will be discussed more briefly than the other branches.

I. CATTLE

Cattle were introduced into Florida and the lower Mississippi Valley in the sixteenth century by the

Spaniards, and into the Atlantic Coast section during the seventeenth century by the English and Dutch. Probably some time during the eighteenth century they were brought from Mexico into Texas. These were said to be specimens of "Bos Taurus," from which the famous "long-horns" of Texas were evolved—a curious mixture of hair, horns, and hide.

Early in the eighteenth century cattle production expanded greatly in the Shenandoah Valley of Virginia. By 1772 settlers had pushed westward from here as far as the Monongahela Valley, where herds of 400 to 500 were soon common. Production also extended into the Piedmont section of Virginia and the Carolinas, but the invention of the cotton-gin in 1795 drove cattle permanently to the westward.

Since the beginning of the nineteenth century cattle have constantly moved toward the West, seeking the areas of cheapest production. Early in the century it was customary for cattle to be grazed in Ohio; but those chosen for market were driven across the Alleghenies in the fall and fattened on corn in the winter and spring. Soon after, production spread into what is now Illinois, Iowa, and Missouri. About the same time, Ohio began to produce corn and to fatten cattle produced there, driving them to Eastern markets such as Baltimore in the spring and summer. Later, Iowa, Missouri, and Illinois furnished cattle by the thousands to be fattened in Ohio.

About 1850 settlements began to be made west of

the Missouri River and cattle production in turn was stimulated in those regions. Texas, particularly in the region of Austin, began to produce on a larger scale about 1820, and after that the numbers in that state expanded rapidly. Railroads went into Illinois before 1850 and, with the expansion of corn growing, commercial feeding of livestock was begun. The fat stock went direct to the East. By 1860 railroads had been extended into Iowa, and that state was added to the cattle fattening section, with Missouri and Texas furnishing most of the cattle for feeding.

After the Civil War, due to a scarcity of cattle in the North and a surplus in Texas, which had been cut off from a market during the war, innumerable herds were driven northward. Regular trails sprang up over which thousands of cattle passed annually.[1] The "Baxter Springs," "Old Shawnee," "Shawnee," "Chisholm" (celebrated in *North of '36*), and finally the "Pecos" are famous in cattle history. Upon reaching the western and southern terminals of the railroads, some of the cattle would be sold for slaughter, others for more fattening in the Corn Belt. At the points where the trails crossed the railroads, shipping towns developed. These included Abilene, Baxter Springs, Newton, Wichita, Cald-

[1] In 1868 it has been estimated that 75,000 cattle went North on the trails. In 1869 the number increased to 350,000; and some have estimated the figure for 1871 as high as approximately one million cattle. See "The Chisholm Trail," *The Country Gentleman*, February 28, 1925, p. 22.

well, and Dodge City, in Kansas; and Ogalalla, in Nebraska. They were the famous "cow towns" of the early West. By the early seventies cattle had become scattered over all the great plains. Utah and Oregon had previously been stocked by cattle brought over the Mormon Trail and in the rush to Oregon and California before the Civil War, and these states assisted in stocking the remainder of the West.

The period from 1870 to about 1905 marked the passing of cattle ranching under free range conditions. The history of the cattle industry during this period is probably the most picturesque in our annals. The development then was largely in Texas, Oklahoma, Kansas, Nebraska, Wyoming, Montana, the Dakotas, Colorado, and New Mexico. "That land was the land of Longhorns, lonely ranches, daring cowboys, vast plains, and lonely rivers, where the wild game stared at the passing horseman." [2] Here life was simple and had little connection with the outside world. The country was very sparsely settled, and a day's journey quite often separated the two nearest ranches. Scattered posts were found at infrequent intervals; usually the post-office, general store, and saloon were the only buildings. Wild animals still roamed the plains, even in broad daylight. A country like this, usually thought unfit for farming, with wooded foot hills,

[2] Roosevelt, T., "In Cowboy Land," *Outlook*, May 24, 1915. p. 148.

brushy river bottoms, and broad rolling prairies, was the proper place to grow vast herds. Here they roamed with absolute freedom, limited in their choice of regions only by the watering facilities. Land was free and the range was open.

The number of cattle belonging to an outfit in those days was the only exact way of denoting the size of the ranch. One could not speak in terms of acres when the plains were free and open and the cattle of every ranch mingled with one another, regardless of ownership. We read of ranches in New Mexico and Texas with as many as 80,000 cattle.

A custom as old as the range was the "round-up," held each fall and spring. In the late spring the round-up, lasting for possibly six weeks, was intended to accomplish the branding and castrating of the calves, and the separation of the mature steers so that they might be moved to good fattening pastures to remain until fall. In the fall the cattle were assembled in order to brand the remaining calves, separate them from the cows, "cut out" the fat animals, and provide for winter pasture.

The round-ups varied slightly in different seasons and in the north and south parts of the region, but the essentials were the same. A "chuck wagon," cook, and probably 20 cowboys were apportioned a certain territory to round up. Each cowboy had a full "mount" of probably 10 horses, for the horses had no feed but grass and could be used only a few

hours at the strenuous work. Each morning the cowboys rode out in pairs and then worked back toward the meeting place, which was often the bend of a river. They brought all the cattle found, and at camp these were branded, sorted, and placed in charge of their respective owners. Roping and tying were the only methods of holding the animal while the work was being done. The famed prowess of the cowboy of those days in roping is not fiction.

The branding was a simple process of burning the letters or figures into the hide of the animal with red-hot branding irons. Each outfit had its own distinctive brand, which was officially registered. A calf was branded according to the brand on its mother. A "maverick" or unbranded animal was the property of the man who found it.[3]

The cattle were never fed anything except grass either winter or summer. In the summer, water was a great problem in many sections, and often good grass was unused for lack of a natural water supply. In the winter the water supply caused little worry, but storms were very disastrous. In a storm the cattle would drift for miles unless stopped by the cowboys. Furthermore, each storm took an enormous toll in deaths among the weakened animals. A ravine or ditch was often the grave of

[3] "The word 'maverick' was defined in Wyoming as follows: 'A maverick is any head of meat cattle, regardless of its age, found running at large without a mother and without a brand, regardless of any ear mark or wattle that may be upon them." Clay, John, *My Life on the Range,* pp. 38-9.

hundreds of cattle which, drifting before a storm, piled one upon another and died.

Other losses under open range conditions were heavy. Diseases ran rampant through a herd, as few methods were then known to combat them. Cattle "rustling" was common, although offenders were often "strung up" by a rope. Wild animals took some, but droughts and storms took the heaviest tolls. In the spring, after a hard winter, the range was at times literally dotted with the bones of dead cattle. Often 25 per cent and sometimes even more than 50 per cent of a herd was known to have died during the winter.

Cattle were marketed off the grass of the Western ranges mostly as steers running from four to six years of age. The most mature and the fattest steers were separated from the rest of the herd in the late spring or summer. The process of getting them to market was known as "trailing out." The object of the owner on this drive was not to make speed, but to get the cattle as fat as possible. They were driven slowly, grazing as they traveled, and often they reached their destination, two to four months after starting, in far better flesh than they had been at the beginning of the journey. The end of the drive was the terminus of the railroad, whence the cattle went northeast for slaughter or fattening.

This great unorganized business of cattle raising as it existed in the eighties could not last. It was

a huge cumbersome affair, without system or objective. It was evident to some that it could not survive in that form in the face of modern conditions. As early as 1888, Theodore Roosevelt foreshadowed the transition that was sure to come when he said: [4]

> In its present form stock raising on the plains is doomed, and can hardly outlast the century. The great free ranches, with their barbarous, picturesque, and curiously fascinating surroundings, mark a primitive stage of existence as surely as do the great tracts of primeval forest, and like the latter, must pass away before the onward march of our people.

Beginning in the last decade of the nineteenth century there was a steady encroachment upon the grazing lands of the cattleman. First came the sheepmen. As the sheep were under herd, they could be taken to the districts where grass was the best, and naturally great enmity resulted when they sought to invade the cattlemen's preserves. As though this were not bad enough, the "homesteader" and "settler" came also, and fences were strung across the face of the one-time "open range." The sheepmen usually moved on to lands less desirable to the agriculturist, but the cattleman sought to maintain his hold by homesteading as many sections as possible. He did this by taking claims in the names of all his cow-hands and relatives. He

[4] *Ranch Life and the Hunting Trail,* 1888.

also leased as many "school sections" as were obtainable. The homesteaded sections wherever possible were on the water, as the control of a water supply was of primary importance. Corrals were built on some of the sections for headquarters. The cattle were turned out to graze on the vast stretches of unoccupied or government land, which, of course, could not be fenced. Even the homesteaders in many instances did not fence, and their land was just as available as the rest. This plan necessitated daily—almost constant—supervision of the herds, and camps often were established near the borders of the area to be grazed to keep the cattle within these limits.

There were also in almost every state, especially Oklahoma, Arizona, Wyoming, and the Dakotas, numerous Indian reservations. About this time these were fenced and leased at very low rates to cattlemen. They were usually operated by large "outfits," renting from 100,000 acres to almost a million acres in extreme cases. "Fence-riding" to discover breaks and repair them, constant surveillance of water, general supervision of the herd, and salting were the chief requirements in handling cattle in this manner. There were, of course, the same "round-ups" as were held on the open range, but here the process was a simple one—merely dividing and classifying the cattle of one "outfit." Production was still cheap, as leases were inexpensive and a minimum of labor was required. Furthermore,

some of the losses which occurred under open range conditions were eliminated.

Many of the items entering into the cost of production have been steadily advancing since the early years of the twentieth century. Land costs in particular have risen faster than the general upward trend of prices. As the homesteaders came into a district, the rancher began purchasing large tracts of land to add to his own homestead sections in order to be assured a sufficient supply of grass.[5] Since many homesteaders had no intention of living on their land permanently, they were glad to sell as soon as they had "proved up." Others grew discouraged with crop failures, which often were due to the settler's failure to adopt methods suitable to the climatic requirements of the country. In some states homesteading was slow in starting, and a few far-sighted men purchased large tracts from the government to keep out the homesteaders later. Thus ranches of varying size were acquired. Fences now became the rule.

All this time agriculture was expanding in the

[5] In many sections in the Northwest the areas suited for the attempted propagation of crops were bordered by mountains, deserts, or foot-hills. In such a case the operator was usually able to control a large body of land merely by purchasing sufficient holdings to control the water supply and to insure accessibility to the grazing areas themselves. In other parts of the country, by the nature of the land or through particularities of homestead laws in many cases, it was necessary for the rancher to purchase his entire holdings outright. Many felt that the best way to make sure that the settlers would remain out of their particular domain was to purchase all the land and thus take it off the market entirely.

one-time range country. Many of the new homesteaders stayed and proved that crops could be produced. This led to an increased demand for the land for farming, and values began to rise. Even though there were failures, no large volume of crops needed to be raised on land that could be bought for $5 to $10 per acre or even less. Increasing values in the Corn Belt assisted in increasing prices in the West.[6] The cattlemen, finding their ranges being steadily diminished, followed the example of the "dry-farmer" and began to put up hay and to grow maize, millet, kafir, and other similar roughage for winter feeding. All this necessitated more labor; and, with rising land charges, freight rates, taxes, and overhead, the expenses of production steadily grew.

The need for economical production forced the introduction of more efficient and businesslike methods in producing cattle on the range. Some

[6] Settlement of the Western cattle country is still going forward at a rapid pace. Hundreds of thousands of acres have been settled in northern Texas and now are given over to the raising of wheat, corn, and other grains known as "row" crops. Farther south in central and western Texas it has been discovered that excellent cotton crops can be produced with the amount of annual rainfall that exists there. Land that formerly sold for $5.00 to $10.00 per acre for grazing purposes, will produce in any average year from one-fourth to one-half a bale of cotton per acre. Thus, the settlement in these areas by cotton farmers from other sections of Texas and from the Cotton Belt proper, east of the Mississippi where land is high in price, is going forward at this time at a rapid rate. Vast ranches, whose owners have resisted or ignored the trek of the farmer into other parts of the surrounding country, are today being subdivided into small farms, since the value of this land for tillage is greater than any possible value it could have for grazing purposes only.

attention was given to feeding the cattle in winter. Wells were sunk, reservoirs built, and windmills and gas engines installed to insure a water supply. The quality of the cattle was improved by the use of "purebred" and registered bulls. Some states passed laws making the use of these on the open sections of the range compulsory. Specialization was one of the results of more businesslike methods. Certain states, particularly Texas, New Mexico, Arizona, and southern Colorado, became primarily cow-country. The steers moved northward into the Panhandle of Texas, Oklahoma, Kansas, Nebraska, Wyoming, and the Dakotas. Some were fattened each year on the Kansas "buffalo" and "bluestem" grasses. Others were fattened in the Northwest. Each year from practically all these sections thousands of four, five, and six year old fat and half-fat steers went to the packers for slaughter or to the Corn Belt states to be finished.

There are four general divisions in the cattle industry. These divisions are: (1) the maintenance of breeding herds to produce calves; (2) the production of "stockers" for further fattening in the Corn Belt; (3) the fattening of cattle in the Corn Belt states; and (4) the production of grass-fat cattle on the ranges.

Unfortunately there is no adequate record of the size and growth of the cattle industry during the time which we have been discussing. The figures as to the numbers of cattle year by year during the

period are at best only estimates and, even were they known to be accurate, would not furnish a completely trustworthy measure of the economic significance of the business. The size and quality of the animals for example, underwent marked changes during the period. However, the brief table presented below will give some idea of the development of the industry.

ESTIMATED NUMBER OF CATTLE IN THE UNITED STATES IN CERTAIN YEARS FROM 1850 TO 1915 *

As of January 1	Cattle		
	Dairy	Beef	Total
1850	10,100,000	14,400,000	24,500,000
1860	13,500,000	18,900,000	32,400,000
1870	14,000,000	20,000,000	34,000,000
1875	16,300,000	20,400,000	36,700,000
1880	19,500,000	25,900,000	45,400,000
1885	22,600,000	34,400,000	57,000,000
1890	25,900,000	39,800,000	65,700,000
1895	27,300,000	41,700,000	69,000,000
1900	27,400,000	37,500,000	64,900,000
1905	26,200,000	33,300,000	59,500,000
1910	30,000,000	32,000,000	62,000,000
1915	30,300,000	28,300,000	58,600,000

* U. S. Department of Agriculture, Bureau of Animal Industry, Circular No. 241, *Food Animals and Consumption in the United States,* May, 1924, pp. 2-3.

II. SHEEP

Until about 1850 sheep were kept primarily in the East and were raised entirely for the production of wool. In the Colonial period, and in some regions until much later, the wool produced on farm flocks was worked into clothing by the farm

family. There was no market for mutton, although it was used by many families for their own consumption. In fact, the type of sheep then raised produced on the whole a low quality of mutton.

Sheep were introduced into the Colonies early in the eighteenth century. Possibly they were grown in what is now New Mexico and parts of Texas even earlier, having been brought in by Mexican colonists. These did not enter into the sheep history of the United States, however, until a long time afterwards. It has been estimated that in 1810 there were about 7 million sheep in the United States, mostly in small farm flocks.

During most of the nineteenth century the industry remained primarily on a wool production basis. The Embargo Act of 1807 and the Non-Intercourse Act of 1809 necessitated the manufacture of clothing in this country, and woolen mills were established for this purpose. After some setbacks, the woolen industry reached substantial proportions by 1830; and between 1830 and 1837 it doubled in size. Power machinery decreased the cost of production, the growth of cities stimulated the demand for goods, and transportation facilities provided adequate means of distribution. The demand for wool to supply the mills greatly stimulated the production of sheep. In 1840 the Census indicated that there were 19 million sheep in the United States, practically all being east of the Allegheny Mountains.

After 1850 the sheep industry moved rapidly westward. Ohio shortly became the center of production. During the Civil War there was a great expansion, followed immediately afterward by a terrible depression caused by an influx of foreign wools, the release of large stocks by the government, and the re-entry of cotton as a competitive factor. Under such conditions Eastern farmers were driven out of the business, and the industry was forced farther west into great areas where grazing was free.

About this time some attention began to be given to the production of a better grade of mutton. Coincident with the establishment of cities, the eating of mutton increased, and the slump in wool values made such a course a natural one. The tendency was centralized in the East, while wool production became the important factor in producing sheep in the West.

From 1870 to 1900 there was a great expansion in sheep production in the West. The high point was reached about 1884, when there were reported to have been 57,500,000 sheep in the country. The ranges became over-stocked. Production was expanding all over the world, and prices declined. In 1884, production was about equally divided between the Western ranges and the states between the Mississippi River and the Alleghenies. By 1900 the center of production was in the Western range states. Sheep raising in the East was then confined

largely to those areas where cultivation of the soil was not practical.[7]

The sheep industry of the nineteenth century in the West was a simple and desultory business.

ESTIMATED NUMBER OF SHEEP IN THE UNITED STATES IN CERTAIN YEARS FROM 1850 TO 1915*

January 1	Number	January 1	Number
1850	29,100,000	1897	41,300,000
		1898	42,600,000
1860	27,600,000	1899	44,600,000
		1900	48,100,000
1870	39,000,000	1901	50,400,000
		1902	51,900,000
1875	40,800,000	1903	53,000,000
		1904	42,500,000
1880	48,500,000	1905	36,800,000
		1906	41,000,000
1885	56,500,000	1907	42,700,000
		1908	43,500,000
1890	47,000,000	1909	44,300,000
1891	46,400,000	1910	44,800,000
1892	48,400,000	1911	45,700,000
1893	51,300,000	1912	44,600,000
1894	49,300,000	1913	43,700,000
1895	46,700,000	1914	42,200,000
1896	42,600,000	1915	42,300,000

*U. S. Department of Agriculture, Bureau of Animal Industry, Circular No. 241, *Food Animals and Consumption in the United States,* May, 1924, pp. 2-3.

Production was roughly divided into three topographical areas of the country. One section consisted of New Mexico and parts of Texas, Arizona, California, Utah, Nevada, and Colorado. Here the

[7] The factual material up to this point is based in part on "The Sheep Industry," United States Department of Agriculture *Yearbook,* 1923.

foundation of many flocks was the old Mexican sheep. These were crossed to some extent with Merinos, but quality on the whole was low and the type poorly adapted to fattening. They were peculiarly able, however, to withstand the rigors of long droughts, which occur periodically in those sections. No feeding was arranged, and water was often lacking. Even when available, the water was often poor and stagnant.

In the northern parts of Colorado, Utah, Nevada, and in western Wyoming, western Montana, Idaho, and parts of Oregon production was based on utilizing the feed of the mountains, the lowlands, and the valleys,—each in its season. In the winter the sheep ran in the valleys and deserts. Here the sustenance was brush, grass, or desert herbage, and water was mostly in the form of snow. In the spring the sheep were driven to the lowlands or foothills. Here, with more shelter and the spring grass, lambing took place. Later the ewes and lambs were driven into the mountains to stay until the autumn season.

In the eastern parts of Montana and Wyoming and in the Dakotas another type of sheep husbandry existed. The humidity was greater and there was a more luxuriant growth of grass, mostly on broad level plains or plateaus. The grass was not so well suited for fattening as was the feed in the mountains, however, and the majority of the lambs were only in "feeder" flesh when fall came. Here a large

part of the flocks were run on the same range during both winter and summer.

The sheep business was comparatively easy to enter. The investment in a flock, a few supplies, and a camp outfit were all that was necessary. Sheep were cheap and a band of 1,000 ewes could be obtained for $3,000.[8] Since the range was free, production costs were largely limited to a small labor charge and to the death loss which Nature exacted from a haphazard industry. In fact, this latter item was the chief deduction from the gross income. Droughts and blizzards sometimes wiped a district almost bare of its sheep population. No attention was given to any system of grazing. Often several flocks followed in the same path until every vestige of grass disappeared. A great many men who engaged in the industry were of low character and had no regard for anyone's rights, present or future. There was constant warfare with the cattlemen, often resulting in armed battle. Since the sheep in grazing left the areas absolutely bare of grass, the cattlemen were either forced to crowd out the sheepmen or move elsewhere themselves. Sometimes one faction won and sometimes another. Gradually the sheepmen moved farther into the rough mountainous areas where the cattlemen were at a distinct disadvantage.

[8] General data found in Wing, Joseph, *Sheep Farming in America,* 1905, have been drawn upon in describing to this point sheep production in the nineteenth century.

The struggle of the sheepmen with the settlers paralleled that between the cattlemen and the settlers. At first settlements were made in the irrigable valleys and then extended into the more arid sections. Between about 1905 and 1912 the Federal government and various states began to open public lands for settlement and sale. As a result the sheep operators were compelled to start buying lands which they had formerly used without cost. In some cases the purchase of land in two or three strategic places controlling the water supply was all that was necessary to control the grazing lands. In other cases it was necessary to purchase the land needed for the lambing season, and in some districts all the range that was required had to be bought.

Rising costs of production after about 1905 produced some important changes in the industry. The investment in land fully doubled the total outlay required to operate. Taxes, added interest, rising labor costs, and leases all increased the overhead. This served to a limited extent to bring the industry to a more stable basis. In the past, men went into the sheep business when it was prosperous and got out when it was not. The increased investment required and the higher operating costs made it more difficult for a large mass of people to rush in and out of the industry. This inclination, however, has never been fully overcome.

An increasing overhead expedited improvement in the quality of the Western flocks. Improvement

in the mutton qualities of Eastern sheep to meet the growing demand for mutton had served to increase further the public taste for sheep meat. Therefore, sheep with mutton characteristics brought a premium for slaughter. To meet this demand, a type of sheep was sought which would afford excellent mutton, but would not lose the ability to produce a good fleece.

The practice began, also, of marketing sheep at a younger age. This was to some extent caused by the increased costs of production, but it was largely due to the growing public taste for lamb rather than mutton. In the nineteenth century wethers were often kept for several years. Gradually this practice was eliminated and a large part of the year's crop sold the same season.

The fattening of lambs even before the great war had grown to be an industry of immense size. In Minnesota a large business was built, starting in the early eighties, which utilized thousands of tons of wheat mill screenings. In Colorado, Idaho, and parts of Nebraska hundreds of thousands of lambs were fattened each year. Beet pulp, peas, alfalfa, and grain were all used in this process. In Ohio, Indiana, Illinois, Iowa, and Missouri corn was the principal item of feed.

By this time sheep had practically disappeared in the Atlantic States. In the Middle West as an all-year-round business they had disappeared largely except in parts of Ohio, Pennsylvania, Kentucky,

southern Michigan, and southern Iowa, where rough lands not suited for other purposes were used. The center of production now was clearly in the West.

Thus there were three general divisions in the sheep industry: (1) production where wool was the major consideration; (2) production where the lamb was of primary importance; and (3) the fattening of lambs for slaughter.

III. HOGS

Hog production has always followed the eras of greatest corn production. In the beginning, hogs were brought to this country by the first settlers in order to supply meat for the home. They soon became an article of trade, and as early as 1790 a considerable amount of pork and pork products was exported.[9] In Ohio, Kentucky, and Tennessee hog production developed rapidly after 1812, and the corn crop was principally marketed as hogs and cattle. About 1820 Cincinnati became a great pork-packing center, due to the development of corn raising in Ohio and of the trade in pork down the Ohio and Mississippi Rivers to New Orleans, where it was reshipped to Atlantic Coast points or abroad. As early as 1832, pork packing had begun in Chicago. This aided in stimulating production in what was then known as "the West."

[9] From "Hog Production and Marketing," United States Department of Agriculture *Yearbook*, 1922, p. 186.

The hog produced in the era from Colonial days to about the beginning of the Civil War was a far different animal from that known today. It was a tall, long-bodied hog, long-eared and particularly long-headed. The well-known "razor-back" of some sections of Arkansas and the South today is a modified descendant of the old type. The development of the improved type of hog known in the United States since the early part of the twentieth century was distinctly a national movement. In the case of cattle, importations were made from England to improve the quality of our herds. Hogs, however, have been improved and perfected by a process of crossing pure bred boars with mongrel sows. The improvement of type proceeded rapidly in this century, and the modern hog represents a high degree of efficiency in utilizing feed.

It was customary prior to the Civil War to allow hogs to run wild in the woods. No attention was given them except to round up and mark them by means of ear brands. Each hog raiser registered his mark with the county. The hogs subsisted chiefly on a diet of nuts, often called "mast," and grass. In the years when nuts were abundant the hogs became very fat. It was soon found that the feeding of corn even for only a few weeks to a "nut-fat" hog produced a firm meat that was in demand by the packers. Thus corn became increasingly a part of the diet.

There were two ways of getting hogs to market.

They could be driven there, or slaughtered at home and hauled. There were regular drovers who made a business of driving hogs to market. This method was difficult and dissipated a part of the fat. Poor transportation facilities made slaughtering at home undesirable.[10] The extension of several railroads into the West just prior to the Civil War made it possible to slaughter the hogs near the source of production and ship the product in iced cars to the East. That fact, coupled with the increasing population in what is now the heart of the Corn Belt where the principal product was corn, added a distinct stimulus to the growing of hogs. After the Civil War the industry in the Mississippi Valley states advanced rapidly and production in the United States was greatly expanded.

Prices were very low from 1870 to 1880, and exports increased enormously. They reached such a large amount that several European countries barred the importation of pork products about 1880. This embargo discouraged hog production, and there were fewer hogs in 1890 than in 1882.

The tendency since the opening of the twentieth century has been for hog production to remain centralized in the corn-growing areas. The increases, however, have been in the western belt and the decreases in the eastern. This is due to the fact that the more distant corn is from the markets the

[10] See Clemen, R. A., *American Livestock and Meat Industry*, Chap. II.

larger the advantage of marketing it through hogs. Thus, production has come to be centered in Iowa, Illinois, Indiana, Missouri, and Nebraska. As corn has been introduced into the more arid sections, however, such as Oklahoma, the Panhandle of Texas, western Nebraska, South Dakota, and Colorado, hog production has followed.

Since hogs are largely used to convert corn into pork, their profitableness depends upon the relation between hog and corn prices. From 50 to 75 per cent of the cost of producing hogs consists in the value of the corn consumed. The price necessary to show a profit has always been expressed in terms of bushels of corn. "It had been a fixed idea with hog producers for 50 years, without the use of careful statistics, that money could be made if hogs could be sold for a value per hundred pounds greater than the value of 10 bushels of corn. In other words, a ratio of 10 bushels of corn to 100 pounds of hog was accepted as determining a fair price.[11] It was found that from 1907 to 1916, inclusive, 11.67 bushels of Number 2 corn (Chicago price) was equal in value to 100 pounds of hog on the Chicago market.[12] It is clear that the absolute price of hogs may be high and yet show an immediate loss due to the fact that the price expressed in bushels of corn is low. Moreover, if breeding herds are drastically reduced in seeking immediate

[11] See Clemen, R. A., *American Livestock and Meat Industry*, p. 650.

[12] Warren and Pearson, *The Agricultural Situation*, p. 146.

profit when prices are favorable the practice may prove disastrous in the long run.

There have existed at all times clearly marked periods of expansion and contraction in hog production. These are caused largely by alternate periods when the relation between hog and corn prices is respectively high and low. Breeding at any given time is determined by the profit made from hogs during the preceding year. These cycles of high and low hog production have become an innate characteristic of the industry. They normally run approximately two years from one extreme to the other. Ordinarily, about one and a half years after hog prices touch their peak *in relationship to corn prices,* hog breeding reaches a maximum. This produces a surplus of hogs a year or more later, by which time usually the hog-corn ratio is at its low point. Breeding, however, does not reach a low point until some time after the hog-corn price ratio has begun to rise again.[13] The complete span of a successive high and low cycle extends, on an average, somewhere between four and five years.

The relatively short swing of the whole cycle is due to the fact that the volume of hog production can be accelerated very rapidly. Approximately one-half of any crop of pigs is female. Normally we will assume that only enough of these young unbred females, or gilts, are withheld from market

[13] *The Producer,* June, 1924, pp. 30-1.

to replace the older sows that are being discarded. When conditions appear unusually attractive, however, the number of gilts kept on the farm for farrowing may be greatly augmented. Contrasted with cattle, hogs are bred young and reproduce before they are one year old. This is made possible by a gestation period of only 110 days. Moreover, instead of bearing only one offspring as do cattle, hogs produce litters averaging six to eight pigs, and through careful feeding, a sow may produce successfully two litters of pigs each year. An entire litter can be produced, fattened, and marketed in less than one year's time. The tendency since 1900 has constantly been to increase the speed of the turnover in hogs through earlier marketing made possible by better feeding. Unusual progress has been made in this direction; litters weighing in the aggregate more than a ton at six months of age are now rather common. Hogs of poor breeding that subsisted on nuts and grass were not ready for market early. It took an improved type of hog, scientifically fed on corn and concentrates, together with specialized effort, to produce these results.

Hogs are utilized extensively as a by-product of cattle feeding. Cattle on full feed of corn pass a large amount of undigested and partly digested corn in the manure. Since the eighteenth century it has been a well-known fact that hogs partially fattened on these offals tend to be thriftier. Fur-

thermore, unless hogs follow cattle that are on feed, all this waste product as well as the grain spilled from feed troughs is absolutely lost. In a large percentage of cases in the Corn Belt, the profit from cattle feeding is largely the added profit procured from the hogs fattened more economically in conjunction with the cattle feeding operation.

Hogs might be called the keystone of the structure of diversified farming in the upper Mississippi Valley. This follows naturally as a corollary to their connection with corn and cattle. Furthermore, in the more arid sections of the United States, hogs utilize practically all the feed grains produced under "dry-farming" conditions. Naturally, therefore, the price of hogs is a matter of concern particularly to these regions.

Two factors peculiar to the hog industry exert a major influence on the price of the product. One is the existence of a large export surplus; the other is the fact that a large part of the product goes into storage. From 1870 to 1900 the exportations of hog products tended to increase. Exports of pork and pork products increased from 128,294,000 pounds, the average of the five years previous to 1871, to an average of 1,528,139,000 pounds in the five years 1897 to 1901.[14] Thereafter they declined somewhat, but hovered around a billion pounds a

[14] Nourse, E. G., *American Agriculture and the European Market* (Investigations in Agricultural Economics, Institute of Economics, Washington), 1924, p. 25.

year just before the World War. Since 1914 these exports have maintained a much higher level. On account of the enormous quantities exported, any derangement of the foreign market has a vital effect on hog prices.

Approximately 60 per cent of the total year's hog crop is marketed in six months beginning November 1.[15] This necessitates a large part of hog products going into storage. The fact that 75 to 80 per cent of the entire hog carcass can be made into cured products makes it possible to store this surplus almost indefinitely. The packer acts, therefore, as the risk carrier in distributing the excess marketings of one season into the deficient marketing seasons when the consumptive demand is just as large as any other time. It is sometimes felt by the producer that such a system provides opportunities of unduly "bearing down" prices during the season of peak marketings. This question, however, lies outside the scope of the present discussion.

To summarize briefly the events of three centuries, it may be said that the development of our livestock industry parallels in a measure the development of the nation. It grew from a simple bartering or "home supply" basis in colonial days to a rather complex industry, nationwide in scope and even international in its trade connections. In gen-

[15] From average monthly marketings at the principal markets for the years 1915 to 1924, inclusive. Compiled from statistics given in *Chicago Daily Drovers' Journal,* January 1, 1925.

eral the production of cattle, sheep, and hogs was marked during the period under discussion by the following distinct trends: (1) the shifting of production from the East to the less settled Western areas, where the industry grew up under very low production costs; (2) the end of Western expansion, the passing of free range, and mounting cost of production; (3) improvement in quality of stock produced and in methods of production; and (4) the increase in size and scope of the industry. As will be shown further in later chapters, the economic organization of the industry is still very crude and inefficient in many respects.

CHAPTER II

THE GROWTH OF LIVESTOCK FINANCING PRIOR TO 1917

The credit structure of the livestock industry as it stood in 1917 [1] had evolved in much the same manner as its productive organization—from an amorphous conglomerate of early ideas and practices. To understand this ill-ordered growth, we shall examine in this chapter: (1) the development of a need for credit; (2) the character of this credit requirement; (3) the means of supplying it; and (4) the methods employed by financial institutions furnishing credit to the industry.

The financing of livestock production will be considered under the separate headings of cattle, sheep, and hogs. The first section will go into much greater detail than the other two sections since the problems of cattle financing apply in a general way to sheep financing, whereas the hog producer's finance problem is much simpler.

[1] We have arbitrarily chosen the year 1917 as marking a distinctive turning point in livestock financing. It is true that the European War gave some stimulus to the livestock industry in the United States from 1914 to 1917 but it was not sufficient to change in any essential manner the methods and practices then in vogue. Soon after our entrance into the war in 1917, however, changes of great consequence began to take place.

I. CATTLE FINANCING

The history of cattle financing in the United States up to 1917 may conveniently be divided into three periods: (1) an early period ending about 1870; (2) a middle period extending from 1870 to the end of the century; (3) the period from 1900 to 1917.

1. *Early period.* No intimate detailed analysis of cattle financing in the early days has ever been made. As nearly as can be determined, however, very little commercial financing was engaged in until after the Civil War. The industry was typically conducted on a small scale, and the producers were apparently able to handle their own modest financial needs. There were few banks in the cattle producing sections of the country, and credit accommodations were thus necessarily restricted. In the eastern part of the cattle belt some working capital was procured by means of ordinary real estate loans. In some communities private loans were secured from individuals who had capital of their own, and from agents who represented capitalists in New York and Eastern financial centers. On the whole, however, little financing in the modern sense of the term was engaged in until after 1870.

2. *The middle period, 1870-1900.* During this period, as explained in the preceding chapter, the industry expanded with extraordinary rapidity as a result of the opening and settlement of the vast

territory west of the Mississippi. By 1880 the number of cattle was almost double what it had been in 1867, and by 1900 the number had been increased practically three and one-half times.

Scores of livestock commission firms were formed in the early part of this period. These grew up concurrently with the meat packing centers and stockyards that were established at the time. The stockyards provided the first real step in standardizing the industry, as far as loans were concerned, by providing a certain and sure outlet for the product. The commission men in the eighties observed an opportunity to secure a large return on money loaned to cattlemen, to control a certain portion of the business, and by aiding the industry in general to expand their own opportunities for profit. As a rule the commission firms themselves had very limited capital. Some loaned funds secured from Eastern capitalists. Others advanced the funds and then borrowed against the paper by endorsing it and discounting with the banks that were developing in the stockyards centers. In almost every case the loans seem to have been endorsed by the firm negotiating them and consisted only of the note of the borrower with a chattel mortgage on the cattle.

Competition later became keen among the commission men. Eastern money became more and more available, attracted by the high rates of interest and the apparent stability of the infant industry. The securing of funds became comparatively easy

for a man with a good reputation. Moreover, the rate of interest was not of vital consequence when the business was booming and profits were large. Ten per cent was the minimum usually charged the borrower and in many sections twelve per cent was common. The bank or Eastern capitalist apparently received from 7 to 10 per cent, depending on the particular arrangements that had been made with the commission firm which advanced the funds to the borrowers. The commission firm often charged in addition a "brokerage" of from 1 to 4 per cent over and above the regular interest charges.

The financing of the industry by commission men was foredoomed to failure. The plan was essentially unsound. In the first place, the commission firms did not have enough capital to make their endorsement of any real value, a fact which led to carelessness since there is a disposition to be less cautious when handling another man's money. Second, apparently no attention was given to the matter of feed. It was assumed that nature would be kind to the borrower. Third, there was no systematic inspection and supervision. Loans were usually made without counting the cattle or so much as seeing them. "Boom count" or the number of cattle which the owner was supposed to own based on the original number in the herd, was accepted as the basis of the loan. Even when inspected originally there was little or no supervision during the life of the loan. Fourth, no limits were

placed on the expansion of the particular individual's operations. This led to "pyramiding." A man with practically no money could, if he had a good name, obtain a loan for all or practically all of the purchase price of a herd of cattle. Even more startling was the fact that an operator practically without capital of his own would be financed for enormous sums. As the borrower then had nothing except the cattle and his willingness to work, it is clear that enormous losses were possible. Everything went well, however, so long as prices were good, feed plentiful, and winters mild.

The hard winters of 1886 and 1887 caused losses that left many producers bankrupt. Commission companies, banks, and individuals loaning on cattle also took severe punishment, many of them following the operators into insolvency. At the time, however, the business of loaning money to the range cattlemen had not grown so large that its embarrassment resulted in widespread havoc. Beginning with 1888 and running until 1892 good prices and favorable natural conditions caused the business of loaning money on cattle to boom. But again in 1893 there were warnings of impending disaster. Financial affairs the country over were upset; but no one apparently heeded these signs. The cattlemen were mostly "plungers," with little judgment. The lenders were largely inexperienced, groping their way blindly as they proceeded. These conditions could not endure. Following a wave of

speculation which swept over the cattle country in 1897, a temporary dislocation of the money markets in 1898 set the ball rolling. A large-scale operator in Kansas, named Gillette, went "broke," leaving wrecked banks and commission companies in his wake. Then the end came swiftly. An accumulation of troubles from the droughts and hard winters, added to a generally careless administration of loans, toppled over the already tottering structure.

3. *The Period from 1900 to 1916.* As a result of the disastrous experiences of the late nineties the cattle industry as well as those loaning to it had been pretty thoroughly "shaken down." A long period of prosperity began soon afterwards, interrupted only temporarily by a flurry in 1905-6, placing the industry in a position to expand on firmer foundations. As we shall see, the financing methods developed during this period were marked by a considerable improvement over the practices of earlier days. A new institution, the cattle loan company, also developed.

The cattle loan company was evolved as a means of financing the livestock industry. Because of the inadequacy of banking resources in the West, outside credit became an absolute necessity for the cattle industry of the range states. Eastern capital could not, however, be loaned directly to the cattlemen, because of the impossibility of studying customs and conditions and scrutinizing risks at a distance of one thousand or two thousand miles. If

cattle financing was to be placed upon a sound basis, some means had to be devised for proper investigation before making the loan and for adequate supervision after its consummation. To meet this intermediary financial need the cattle loan company of the twentieth century was evolved. In serving as the connecting link between the borrower and the investor the cattle loan companies earned very substantial profits and hence grew rapidly in numbers and importance in the ten-year period ending in 1918.

A careful analysis of the business of the cattle loan company is indispensable to an understanding of the condition of the livestock industry since the World War. They were of two classes, independent companies and those affiliated with banks. Each class might be divided further according to whether or not they were affiliated with the packing house companies. Mr. Armour, in the late nineties, was apparently the first packer to sense that these loan companies would be profitable, and at the same time he undoubtedly considered them valuable adjuncts to the packing business itself. The majority of the companies controlled by the packers were connected with one of the large livestock banks in a packing center, as these were usually owned and controlled by the packers themselves.[2] There were also many loan companies connected with banks

[2] Interview with I. A. Vant, President of the St. Joseph Cattle Loan Company, St. Joseph, Missouri, January 1, 1918.

which had no connection with the packers. Furthermore, the majority of the independent companies were controlled by other interests.

These companies were all private corporations. Many were incorporated in Delaware, probably because of the favorable terms offered by that state with respect to fees, taxes, and restrictions. The capital stock and surplus varied from $25,000 to $750,000. In the case of companies affiliated with banks, the capital was subscribed in the main, if not entirely, by the directors and shareholders of the allied bank. Generally these companies were the largest. When operated in conjunction with a bank, the officers and directors of one institution were also officers and directors of the other. Usually the manager, however, and his assistants had no duties with the bank. Practically all the companies were located in some one of the packing centers.

Several advantages accrued to the bank which was affiliated with a cattle loan company. In addition to the profits that could be earned, these companies were not limited in the size of the loan that could be made to any one individual. Thus, a national bank limited in its loans to any one person by law to 10 per cent of its capital and surplus could, through the loan company, make unlimited advances. As a matter of fact, loans were occasionally made for as much as $500,000 to one person or firm. Moreover, a loan company was not required by law to keep any reserves, inasmuch as there were no

depositors to protect. The majority, however, kept a relatively small reserve fund for possible losses. A wider distribution of loans and thus a wider distribution of risks was made possible by operating a loan company in conjunction with the bank. Furthermore, such an affiliated company provided a place to turn for paper in times when demand was dull in commercial banking circles. In addition, affiliated loan companies added to the bank's cash balances. Not only were there the actual deposits of the company's working capital, but in addition there was a large volume of outstanding checks providing the banks with loanable funds. When the loans were made, remittance was sent the borrower in the form of a draft on the bank, which was often many days in returning. On the other hand, a large number of the loans would be liquidated by the sale of stock in the market where the loan company and bank were located; hence no time was lost in collecting drafts which retired the loan.

There were also advantages to the loan companies that were connected with a strong bank. One was the added prestige, which assisted materially in selling the paper. The public always assumed that the loan company was as strong as the banking institution with which it was affiliated. Second, the loan company had the advantage of certain credit systems and machinery. A connected bank, also, made a convenient clearing house for collections and payments. Again, the bank took loans from the

affiliated institution in times of stress, and at periods when paper was selling slowly on the outside or in the open market. Furthermore, less actual cash for a working balance was required than would otherwise have been necessary, since a loan for a few days was always assured with the associated bank if the company found its balances insufficient to take care of a particular need. Thus the earnings were larger, as more capital could be kept at work.

Loans available from 1900 to 1917 for cattle loan companies may be divided into two general classes: (1) range loans, and (2) Corn Belt loans. The great majority of the loans made were range loans. These range loans were further subdivided into two classes: (1) loans on breeding herds, and (2) loans on "stockers." Loans on breeding herds were to finance cow herds, where the production of calves was the object of the operation. "Stocker loans" included loans on young stock to be grazed until nearer maturity, and loans on mature steers intended for grass fattening. This latter type was sometimes called "summer loans." This meant that the steers were purchased in the spring after having been "cake fed" during the winter, fattened usually in Kansas, Nebraska, or the Dakotas on grass, and sold from the latter part of July to October as "killers." [3] Younger cattle were sometimes handled

[3] "Killers" were cattle purchased by the packers for slaughter purposes.

in this same manner, but sold again in the fall as stockers.

Corn Belt loans were primarily loans on beef steers ready to go on grain feed prior to their sale as finished beef. The greater part of these cattle were then three or four years old, with only a small percentage of calves and yearlings. These young cattle created what might be classed as "semi-feeder" loans. Such loans would be made on this younger stock to be grazed a part of the year and then put on grain feed, or on stock "roughed" over the winter on hay and fodder, and fattened on grain in the spring and summer. In addition there were a limited number of small breeding herd loans, but these were usually made only on small groups. The third class of Corn Belt loans was "dairy loans" which were made with milk cows as the bases.

Some Corn Belt loans were made by cattle loan companies located in stockyard centers adjacent to the corn production areas. In the main, however, range loans constituted the bulk of the business of loan companies in this period. One very important reason for this was the rate of interest which was 2 to 3 per cent higher on the range, although no differentiation was made by the buyers of cattle paper between the loans of one section and another.

The loan company made its loans either directly to the borrower, or indirectly with the assistance of a local bank. Most of the larger loans were made direct, but the actual negotiations and the making

of the papers for many of the smaller loans were handled by a local bank. The steps in making a loan were essentially the same in all the better companies, although the forms used varied in almost every instance.

There were several steps in the making of a loan. After the original inquiry had been made, the first step was to obtain a financial statement. Financial statements were almost unknown in the cattle business in the nineteenth century, but by 1917 it was customary to require a financial statement. A simple but excellent form, adopted after five years' use by a firm operating exclusively in the Corn Belt, is shown in Appendix A. Forms used in the range country included details of the age and brands of the livestock. Many firms handling range loans exclusively had in addition application blanks, which provided for a detailed description of the collateral to be offered, including the location of the cattle, the brands, the loan desired, and bank references. Most firms, also, had what was called a "brand sheet." This consisted of drawings of an animal, making it possible to chart the exact brands and ear marks and their precise location on the cattle. Thus, the obtaining of a financial statement or the obtaining of an application, financial statement, and brand sheet, as the case might be, completed the first step in making a loan.

The second step was to confirm all this information through consulting county clerks, recorders of

deeds, and others, and to find out if the title to the land and all other property shown on the statements was in the name of the borrower, and the encumbrances on record were as given. The judgment record as well was checked.[4]

The third step was to ascertain the financial and moral responsibility and standing of the borrower in his community. "The brand on the man is more important than the brand on the cattle." This oft-repeated quotation represented the view of every conservative loan company. A loan on cattle was not a collateral loan in the same sense as a loan advanced on stocks and bonds. A rogue with plenty of collateral of the latter sort could undoubtedly be safely financed in "the Street," but in the cattle business moral responsibility was properly the first consideration. The majority of loan companies depended on the local bank or bankers for data regarding the borrower's financial and moral responsibility, as well as his past record for completing profitable operations in cattle, and his knowledge of the cattle business.

The fourth step was to inspect the farm or ranch, interview the borrower, and inspect and appraise

[4] Conservative companies refused to make what was termed a "split loan." Such a loan existed if the prospective borrower already had money borrowed on cattle from other organizations. While at times the age and description of the cattle might be very separate and distinct on the loans outstanding and the loan proposed, and the collateral might be many miles apart, yet these loans were "trouble makers." In various contingencies all manner of complications between the several lenders became possible; lawsuits usually resulted as well as losses.

the collateral. Inspectors were employed who were usually capable, experienced men, familiar with the region in which they worked. They estimated the value of the property and compared it with values given on the statement. The available feed and the water supply was inspected; the collateral rounded up, counted, and appraised. The report of a really capable inspector was the most accurate information the loan company could have. The condition of a man's property and stock revealed a great deal about the man.

If the county records, character references, and the inspector's report were satisfactory, the loan was completed. Promissory notes in various denominations, ranging from $1,000 upward, were signed. The form of the note varied in different states. A chattel mortgage on a form consistent with the law in the particular state was made. This, while leaving possession of the property with the grantor, actually gave title to the grantee, so that control of the property was with the latter in case of any failure to perform the contract. Moreover, no sale or movement of the property could be made without the authority and permission of the grantee. A mortgage on a breeding herd also included all the increase of the herd.[5] Furthermore, in some cases the mortgage covered the feed which was to be allotted the cattle during the life of the loan.

[5] The forms presented in Appendix A cover: (1) all the essential points in a good mortgage form applicable to several states, and (2) a typical note form.

The final step in making a cattle loan consisted in placing the mortgage on record in order to give legal notice to all third persons that the collateral was subject to the chattel mortgage just executed. The requirements relative to the filing or recording of such an instrument and maintaining its validity and effectiveness varied in most states.[6]

The actual transfer of the funds made available

[6] An illustration is afforded by a contrast of the Iowa and Illinois laws regarding chattel mortgages:

Iowa Chattel Mortgage Law	Illinois Chattel Mortgage Law
Filing (or recording) with county where mortgagor resides.	Same.
Acknowledgment before any authorized notary public.	Before justice of peace, county judge, clerk or deputy clerk of municipal court in county where mortgagor resides.
Effect—needs no renewal and good until cause of action banned by statute of limitations.	Good until maturity of obligation but not beyond three years except by renewal or extension within 90 days from maturity by filing with recorder of deeds an affidavit signed by mortgagor and mortgagee showing amount unpaid and when balance due. In this manner the mortgage may be extended for one year from maturity or from end of the three year period.
Miscellaneous—Encumbrance against exempt personal property void unless joined by both husband and wife, except those mortgages securing the purchase price.	All notes secured by chattel mortgages shall state that they are so secured, otherwise the mortgage is void.

by the completion of the loan was by draft to the borrower in case the cattle were unencumbered. If they were being purchased, the transfer was by payment of a draft payable to the seller for the purchase price of the cattle less such cash margin as was required from the borrower. A special draft form was sometimes used, or a bill of sale was attached to the draft in which the seller warranted the title to the cattle. In addition, a release was attached, releasing any previous chattel mortgages of record on the stock or, if no mortgage was of record, a statement to this effect by the proper county officer was attached. (See Appendix A for these documents.)

The rate of interest charged the borrower in this period continued to be high. Even the feeder loans were usually made at 8 per cent. On range loans it would seem that the majority were made at 10 per cent. Twelve per cent in fact was still a prevalent rate in many states. If it happened that the legal rate of interest was too low to be attractive, a "brokerage" fee was added, which side-stepped the legal technicalities but had the same effect as an increased rate. Commercial paper rates, rates on money over the counter, and other financial factors all had some bearing on the general rate of interest in effect at a given time. On the whole, however, rates tended to remain at a high level regardless of outside fluctuations. This was because local banks in the cattle country did not meet sufficient com-

petition from other loaning organizations to make necessary a reduction of rates in line with general money rates. Just prior to 1917 some slight lowering of interest rates was noticeable due in part to the increasing number of loaning agencies available to serve the cattlemen.

The continuous operation of the cattle loan companies depended upon their ability to rediscount their loans. As the capital of the company was loaned, new funds for additional advances were obtained by the sale or rediscounting of the loans already completed. The primary purpose, as a matter of fact, of the cattle loan companies was to serve as a broker between the investor and the cattle grower.

Cattle paper was mainly rediscounted through commercial banking channels. In the case of loan companies affiliated with banks, the two largest sources, and in most cases practically the entire outlet for the sale of cattle paper, were the small country correspondent banks and the large city correspondents. It was customary for the banks in New York or other Eastern cities having the account of the affiliated bank to purchase an amount of cattle paper equal to or larger than the average balance which the bank had with them. Almost every country correspondent had surplus funds at certain seasons of the year, and some had surplus funds at all times. These funds were sent to the correspondent banks affiliated with the loan com-

pany with the simple instructions, "Send us some cattle paper maturing——"

In addition, other country banks with surplus funds that were not correspondents of any bank in a livestock center were prospective purchasers. It was not an uncommon practice for the affiliated city bank to agree with its country correspondents when purchasing paper of the loan company that, if an unusual demand for money developed in their community before maturity of the paper, they would take it up upon presentation. In normal times the law of averages assisted in preventing this rule from being burdensome. It made the investment on the part of the country bank an ideal one. Companies not affiliated with any bank undoubtedly relied mainly for the sale of their paper on country banks without livestock banking connections, and on their own city correspondent. While in theory considerable cattle paper was sold to private investors, in actual practice this outlet was comparatively very small.

Cattle paper was sold or rediscounted customarily at a rate of interest from 2 to 5 per cent below the rate of the loan itself. The actual rediscount rate at any one time was governed, of course, by commercial paper rates and by rates in the money market in general. The notes usually bore interest only after maturity, the interest to that date having been added, so that the investor knew nothing of the actual rate of the loan. The margin on Corn

Belt loans was smaller than on range loans. On the average 2.5 per cent was probably the customary amount on these, although at times it was more; and apparently it never fell below two per cent. These statements are generalizations based on thousands of transactions over the entire United States. Concrete examples of specific exceptions could undoubtedly be found in every case.

Four general methods of disposing of cattle paper were followed. They were (1) the borrowing of funds based on a note of the cattle loan company, with the cattle paper pledged as collateral; (2) the sale of entire loans, practically always endorsed; (3) the sale of separate parts of a loan represented by a note for only a portion of the whole, these being apparently always endorsed; and (4) the sale of collateral trust notes or debentures. This latter plan was infrequently followed in that period. The fundamentals of the plan were the pledging of the collateral to a trustee and the issuance of notes or debentures for 75 to 100 per cent of the securities pledged. This was very convenient for small investors, and, since they relied mainly on the endorsement, was satisfactory. The purchasers of large blocks preferred to inspect the actual loans.

The chief exception to the rule that loans were endorsed when sold seems to have been in transactions where loans were sold by the loan company to the affiliated bank. Since most of the paper was sold with endorsement the responsibility to the in-

vestor to pay at maturity lay entirely with the loan company.

After the rediscounting of the paper the supervision of the loan itself was the chief requirement prior to maturity. Conservative and efficient companies inspected the collateral and conditions surrounding the loan at least once during its duration. If any unfavorable general conditions arose that might affect particular loans these were scrutinized more closely. The district in which the loan was made, the type of cattle loaned upon, and the financial strength of the borrower had very important bearings on the number of inspections. The most essential point in all loans was for the company to keep sufficiently informed as to the condition of the security to know at all times that the loan was safe.

The majority of range loans were made to mature in six months. In most cases they actually were renewed from one to three times, and even five times in extreme cases. In actual practice probably one renewal was all that ever showed on the face of the loan. If further renewals were necessary an entire new loan and new papers were executed. It naturally would have been difficult to sell a loan that had been renewed three or four times even though it was absolutely sound.

The six months rule was a hardship on all concerned but was practically a trade necessity. Commercial banks had become accustomed to consider

this the maximum length of time for which a loan should be made. They would not purchase paper with a longer maturity. They disliked to look ahead in the future any farther than that. Furthermore, they wanted the paper in such form that it could be resold to their correspondent city bank in an emergency. Also, after 1916 cattle paper could be rediscounted with the Federal Reserve Bank by any member bank, providing it had a maturity not exceeding 180 days.

Credit analysis by purchasers of cattle paper was not well developed during this period. In the main, paper was purchased by investors entirely upon the basis of the general reputation of the firm selling the paper. An institution headed by a dynamic colorful figure well known in his district could always sell paper easily. A good fellow or a good talker was often the best paper salesman. Many buyers undoubtedly depended entirely upon the standing and reputation of the bank affiliated with the loan company. Many independent loan companies were considered sound whose methods were absolutely bad, simply because the upward trend of values since 1900 had prevented any losses.[7]

On the whole, banks were as important a source of credit as cattle loan companies. As a matter of fact, in the heart of the Corn Belt banks supplied

[7] A large part of Chapter III to this point is based on a revision of materials used by the writer in 1918 in preparing a thesis, "The Cattle Loan Company," viewed in the light of six years' experience in handling cattle paper subsequent to that time.

the major part of cattle credit. This percentage constantly decreased as one moved toward the range. Finally, in the heart of the range country, banks were a minor factor in cattle credit. Illinois, Iowa, and north Missouri might have been considered the heart of the Corn Belt, especially in the last 10 years of the period from 1900 to 1917. The outlying parts included the remainder of Missouri, Kansas, Nebraska, eastern South Dakota, southern Minnesota, certain parts of Colorado and Oklahoma, and of course the Corn Belt states of Indiana and Ohio.

Thus, generally speaking, bank credit for the cattle industry followed the corn area. In like manner, after the credit became available, it was largely used in the making of feeder loans. Such loans represented the cream of all cattle loans. The loans were made for six months, and in the majority of cases no renewals were required. The security back of the loan was daily gaining in value, due both to an increase in pounds and to an increase in the intrinsic value of the whole animal. This was owing to the change from a lower price raw material to a higher price finished product. The loans were self-liquidating by the sale of the security on the market. Furthermore, this cash market existed every day. The loans were based on a necessity of life, thus insuring permanence in the demand and in the industry. Such paper was held to be good collateral at any correspondent bank or with the Federal Reserve, if a local bank became in need of

funds quickly. In addition to the cattle themselves, back of the loan there was always a number of hogs getting fat on the offal from the cattle which provided added margin and added profit.

Naturally, most feeder loans were made in a country highly settled. The farms were generally in half sections, quarter sections or less. The loans usually covered from 20 to 100 head of cattle. The farms were fenced. Shelter and water and an abundance of good feed were easily obtained. Supervision was a very easy matter.

In the Corn Belt proper, the requirement by a bank of a chattel mortgage was the exception rather than the rule. The loans were mostly made on the unsecured note of the borrower, but it was understood that the proceeds of each particular loan should go into a cattle-feeding operation, and that the loan was to be paid out of the proceeds of the sale of the security. In the border districts a chattel mortgage was usually required. When required in the Corn Belt it was usually on a loan to a tenant, or in a community where the custom had been established and perpetuated by a particularly cautious banker. It was also required if the loan was to be rediscounted with a cattle loan company.

Following the establishment of the Federal Reserve system the requiring of financial statements of the borrower, whether on unsecured note or chattel mortgage basis, became increasingly common among banks. In the first place, if the paper was

to be rediscounted by a member bank a financial statement was necessary. Second, member banks soon began to appreciate the value of a statement even when no rediscounting was contemplated, and this idea spread to non-member banks. It required much patient explanation with many farmers to secure a statement, but the antagonism continually grew less as the farmers came to appreciate that a statement really strengthened their credit.

Dairy loans were handled exclusively by local banks. They were commonly centralized in northeast Iowa, northern Illinois, Minnesota, Wisconsin, New York, and Pennsylvania. The loans were in relatively small denominations. Their payment was generally on a monthly or weekly payment plan from the checks derived from the butter, cream, or milk sales. They were excellent loans for a local bank, but not the type that could be handled outside the local community.

Not all feeder loans could be financed locally. In the first place, some men operated on a sufficiently large scale to require larger loans than the bank could legally grant to one person. A hundred head of cattle at $60 per head, requiring $6,000, was often more than the bank could handle, especially in view of the fact that it must also finance the feeder for other things, such as seed, labor, feed, hogs, supplies, and machinery. Many feeders in the Corn Belt during this period handled from 100 to 500 head of cattle at one time, with an occasional feeder

having even as many as 2,000 head. The total volume of credit demanded at a peak season in a particular community where feeding was highly concentrated was also often more than the local banks could handle.

Under such conditions the banks turned to some of the following plans: (1) borrowing or rediscounting with their correspondent banks; (2) the use of "chain-banking" or trading notes; (3) placing the loan direct with their correspondent bank; and (4) placing the loan direct with a cattle loan company or commission company. The first plan was used usually where the loan was not too large, but where funds were scarce. After the establishment of the Federal Reserve system member banks usually used the Federal Reserve Bank instead of their city correspondents. Under the second plan a loan would be split into several component parts, one of which would be kept by the "home" bank and other notes of a size not too large for the banks in question distributed to other banks owned or controlled by the same man or interests. Even unrelated banks have been known to follow this practice as a matter of convenience to each other. The third plan was followed if the loan was too large to be handled by the local institution. The fourth plan involved the same principle.

Often banks in communities where cattle were handled on a large scale had as one of their correspondents a livestock bank in one of the stockyard

markets. These banks could be used either to take loans from the bank with their endorsement or direct from the customer. In districts where the size of the loans was too large or when the correspondent bank was loaned approximately to its limit, the loan would be placed through the cattle loan company which was affiliated with the correspondent.

A considerable volume of loans was made direct to the borrower by livestock commission companies. The essential features of the loaning of these companies were the same as for cattle loan companies. There were, however, some distinct disadvantages attached to loans obtained through livestock commission companies. Usually their operations were on a relatively small scale and therefore limited to their best customers and those best known to the company. Since the object of these loans was to control the business of the borrower and get the commission from the sale of his stock, the quicker the turnover of the loans, the better they were liked. It was very difficult to secure longer than six months time on a loan. The borrower likewise was usually required to purchase the stock through the company that financed him and it was understood that at the time of marketing he would ship it to them for sale. In addition, the commission company expected to build a volume of "non-credit" business in the particular community around the borrower. Therefore, "bell-wethers" or influential

individuals among the feeders were always sought as far as possible.

These commission firms were usually not paper brokers in the same sense as the cattle loan companies. As a general rule their only outlet was their correspondent bank which was practically always one of the livestock banks in the packing centers. The lessons of previous attempts of commission firms to lend money to cattlemen on an extensive scale had taught the stockyard banks to extend credit to these companies somewhat sparingly and cautiously.

The final important source of funds for cattlemen was through "private" agencies. In almost every community there were retired farmers with money to lend, and many placed it all in cattle loans. Other individuals with surplus funds followed the same course rather than put it in a savings account at 3½ to 4 per cent. The local banker often had money of his own to loan. Insurance agencies handled funds for other people, or perhaps for Eastern connections on a commission basis. It was to some of these private agencies that the so-called "marginal" borrower usually turned. Among those using this source were the tenant and the farmer just starting in business, able to offer good collateral but not particularly desired by a bank. Usually they paid a higher rate than was paid at the banks.

II. FINANCING SHEEP PRODUCTION

Prior to 1850 the financing of the sheep industry was insignificant. In fact, not until after the Civil War, when the industry began to expand rapidly west of the Mississippi River, did any appreciable need for credit develop. In the period from 1870 to 1900 the relatively small credit needs of the industry seem to have been handled by the livestock commission firms in markets specializing in sheep (including Chicago, Denver, and Omaha) and by banks. The need for sheep credit at that time compared to the need for cattle credit is indicated in a general way by a comparison of the respective farm values in the following years.

FARM VALUES OF SHEEP AND CATTLE, 1867-1900

Year	All Sheep	All Cattle
1867	$ 98,644,000	$ 425,201,000
1871	68,310,000	676,561,000
1880	80,757,000	675,775,000
1890	86,447,000	907,953,000
1900	186,072,000	1,786,171,000

We observed in Chapter I that in 1884 sheep production was about equally divided between the Western range states and the states east of the Mississippi. Flocks in the East were relatively small, and local banking facilities were generally capable of handling any credit needed there. In the West, practically the only credit extended was to large

substantial organizations with a known credit rating. This credit was furnished often by commission firms in the markets, and in some instances loans were made direct with stockyard banks. In practically all cases the ultimate source of the funds was a bank.

After 1900 the number of local banks began to increase in the West. As in the case of cattle, however, the gradual increase in sheep values from 1906 to 1917, and the growing importance of the West in this period as a producing section, made some credit essential outside that furnished by banks. Loan companies, in many instances loaning on both cattle and sheep, began to play a more important part in sheep financing during the last five years of the period under discussion. Their operation in general paralleled that of strictly cattle loan companies, which has already been outlined in detail. Thus by 1917 four general sources of credit were available to the sheep industry: (1) local banks, (2) livestock commission companies, (3) livestock loan companies, and (4) stockyard banks. In the main, banks, both directly and indirectly, were the largest factor in supplying needed credit.

All sheep loans may be divided into two general classes: (a) *breeding loans, and* (b) *feeding loans.* Breeding loans were divided again geographically into Western breeding loans and Eastern breeding loans. Feeding loans in the same manner were divided into Western feed lot loans and Corn Belt

feeding loans. Breeding loans were made on flocks where the production of wool and the growing of lambs for mutton and breeding purposes was contemplated. In the West, breeding flocks were handled on a relatively large scale and a considerable proportion of this credit came through livestock loan companies. Western banks supplied a large part of this credit, and of this a considerable amount was handled without a chattel mortgage. Commission companies handled a small proportion of the total breeding loans, and imitated the methods of the loan companies. In the East, which included both the Corn Belt and the Eastern states proper, the financing of breeding flocks was entirely through local banks. The credit required was usually not large and it was handled on the basis of an unsecured note. In these sections the flocks averaged from 50 head in less important areas to 200 in areas where breeding was more concentrated. In the West, flocks ranged generally from 1,000 to 25,000, although larger in some instances.

Sheep breeding loans liquidated themselves more quickly than loans on herds of breeding cattle. Consider, for example, a breeding loan made in October, 1914. In May, 1915, a wool clip was available averaging around 8 pounds per head. This was worth approximately 22.8¢ per pound or $1.82. In addition, an average of one lamb per ewe was possible. This lamb, dropped in April or May, was ready to sell in August, September, or October. In 1915,

assuming a 60-pound average, it was worth at least $4.00. Thus the total value of the lamb and wool was about $5.82. That year the average farm value of sheep was $4.50. Under favorable conditions, many flocks have paid for themselves in one year's time. In the case of breeding loans on cattle, the time required was at least from 2 to 4 years. Loans on sheep breeding flocks were made to mature in six months. Hence, one or two renewals were always necessary. Fifty to 75 per cent of the appraised value of the flock was considered a safe loan.

Feeding loans in the West were made in concentrated areas. The San Luis and Arkansas valleys of Colorado, the Greeley and Fort Collins districts in the northern part of the same state, and irrigated sections of Idaho, Wyoming, and Montana, constituted the best known of these. Adjacent to milling centers and the stockyards, large sheep-feeding establishments were found where feeding was often done on a contract basis—so much per day of feeding. The remainder of the sheep feeding was concentrated largely in the corn areas of Nebraska, Iowa, Missouri, Illinois, Michigan, Indiana, and Ohio.

The most important source of credit for feeding loans was the banks. Next came the commission companies (which also meant ultimate bank credit), and finally, livestock loan companies. The loans were made to mature in 90 to 180 days. The bulk never ran as long as 180 days, and in the Corn Belt

90 to 120 days was the average. Seventy-five to 100 per cent of the appraised value was loaned, depending upon the standing of the borrower, his experience, and his available supply of feed. In the West, commission companies and loan companies usually required chattel mortgages, and in some instances the banks required these. In the Corn Belt, the banks practically never required chattel mortgages, while commission companies required them in most cases.

In some circles sheep loans were looked upon with disfavor. There were, however, several attractive features to them. The most attractive point was the quick maturity and rapid turnover. In addition, the percentage of reproduction was higher among sheep than for cattle. Moreover, the liquidation of breeding loans could come from three sources: wool, lambs, and the security itself. Finally, in feeding loans there was not only a more rapid turnover, but the percentage of gain in weight was much above that of cattle. For example, a lamb weighing 60 pounds in October would, after 120 days of corn feeding, weigh 85 pounds on the market. A steer weighing 1000 pounds would weigh 1,250 pounds at the end of 120 days of corn feeding. Thus, the percentage of gain would be 42 per cent for the lamb and 25 per cent for the steer.

There were several disadvantages, on the other hand, in financing sheep as compared with cattle.

Sheep were subject to a large number of diseases. It was a well-known fact that a pestilence often wiped out almost an entire flock before it could be checked. All manner of internal and external parasites infested them and had constantly to be fought. Wild animals and dogs made great inroads into a flock if it were not closely guarded. Storms often took a terrible toll. It was difficult to brand sheep so that they could be readily identified for any considerable length of time. In other words, sheep loans were attractive when conditions were normal and the utmost caution exercised, but nothing could be less attractive when diseases, vicissitudes of the weather, and falling markets all took a hand. There was no other industry where experience was so large a factor. Therefore, a bank or loan company loaning large quantities of money on sheep needed to be alert to every possible danger, and to exercise the utmost judgment and caution in choosing their customers.

III. FINANCING HOG PRODUCTION

Hog production having always been concentrated in the Corn Belt, naturally the financing of the hog industry has been peculiar to that section of the country. This financing has practically always been done by the local banking institutions. In fact, hog financing has hardly existed as a separate and distinct business like cattle and sheep loaning.

Credit is needed in the hog industry primarily to

finance the purchase or production of hog feed. The original investment required to purchase a drove of sows for breeding purposes is small compared to the amount of feed required to produce the pigs and fatten them for market. An illustration readily reveals this condition. Farmer "A" purchases 10 head of sows at $20 each, making a total investment of $200. In approximately four months he will secure probably 65 to 80 pigs from them. By the end of one year he will have conservatively 15,000 pounds of pigs, exclusive of the sows. Based on a $20 valuation for the sows these pigs should be worth proportionately about $1250 to $1500. There are also the original sows which should be worth at least $250, counting only an increase in size and not in intrinsic value. Thus the original hog investment represents only 10 to 15 per cent of the final value of the drove. This operation probably would require the use of about 1500 bushels of corn. It would require, also, the use of oilmeal, tankage, shorts, and perhaps other by-products and grass.

The financing of the entire transaction involves both general farm financing and loans for a specific purpose. In both cases it is handled by the local bank and on the basis of an unsecured note. In the beginning the local bank may make a loan to the producer for the purchase of sows. It also probably executes loans from time to time for the purchase of concentrates and by-products. As for corn, a

part or all is raised on the farm, and in over half the cases the farm is encumbered. Where interest must be paid on this encumbrance before the corn is marketed in the form of live hogs, it is necessary for the bank to advance it. The same is true of taxes. Where bank borrowing does not have to be resorted to, the burden of current financing is really borne by the mortgage indebtedness. Finally, if the producer does not grow sufficient corn to "finish" all his hogs, more must be purchased, and the local bank finances this.

The financing of equipment is in part accomplished by long-time land loans, and in part through the local banks. This item, together with feed, constitutes practically the entire cost of producing hogs. Small improvements from time to time are usually financed by the local institution. Improvements on a larger scale like barns and other major improvements are often financed as a part of the land encumbrance. Where farmers buy their feeding pigs at the markets or in the non-grain-producing areas of the West, the original investment is larger in proportion and the feed requirements somewhat less than if the pigs had been grown by the feeder. Transactions of this kind are financed by the local banks the same as those where the entire operation is completed on the customer's farm.

No intermediary financial agency has been developed for hog financing. This has been due largely to the fact that there has never been a real

necessity for such action. Furthermore, no plan has been found for successful identification of individual hogs. The hazard from contagious disease is also great. In a 10-year period it was found to be over 2½ times as large as in sheep and over 3½ times as great as in cattle. This has tended to discourage outside institutions from financing hog operations with only a direct lien on the hogs as security. The country banker is in a better position to collect his loans from general revenues in case of disaster to some particular hog deal than any institution distant from the locality.

It is clear that the financing of hog production is a part of general farm credit. It has been estimated that about 40 per cent of the income from an average Iowa farm is furnished by hogs.[8] A corresponding percentage is provided in other Corn Belt states and in districts in the outer belt of the corn producing area. Thus it is evident that a good proportion of Corn Belt bank financing, directly and indirectly, has gone for the aid of the hog industry.

On the whole the hog industry is now satisfactorily financed. The Corn Belt is well supplied with banking institutions. In general the facilities are adequate to care for the needs of the hog grower. Such problems as exist relative to hog financing are not in the main specific ones, relating rather to possible improvements in agricultural finance in gen-

[8] U. S. Department of Agriculture, *Yearbook*, 1922, *Hog Production and Marketing*, p. 202.

eral. We shall, therefore, confine our comments in the following chapters to the more specific and pertinent problems relating to the financing of the cattle and sheep industries.

It seems clear that the expansion in the size of the industry and the increase of livestock values, particularly from 1870 to 1917, were largely instrumental in creating the extensive need for credit which developed. In the beginning credit facilities were crude, but the measure of their service steadily increased with the advance of settlement and the increase in the capitalization of the business. In the cattle and sheep industries, the movement westward to the ranges produced the need for special financial institutions and devices. Banks were few, small, and far between in most of the districts where these industries flourished from 1870 to 1917. Thus the financial requirements, which grew continuously greater, had to be supplied through institutions which could attract the resources of the more settled and wealthier parts of the country farther east. From this a distinctive type of financing developed around the production of cattle and sheep. That there were serious weaknesses in this system will be apparent from the discussion of the war and postwar periods.

CHAPTER III

THE LIVESTOCK INDUSTRY IN THE WAR PERIOD

Even as late as 1914, it has already been pointed out,[1] cattle and sheep raising retained a looseness of organization, a tendency to speculative excesses, and other pioneer qualities which characterized the pastoral stage of our national development. Expanding rapidly under pioneer conditions it was inevitable that the livestock industry should have defects of organization, and features ill-suited to the more mature stages of our economic evolution. But the rancher who had begun life under the old tradition found it hard to change his easy-going, wasteful methods and business habits. The remedying of such defects would eventually have been forced upon the industry but, except for the war, their correction would undoubtedly have been a gradual process largely free from the disasters of the last few years.

A slow transition from the old exploitative frontier conditions to a permanent type of scientific and efficient cattle production, which had been in progress since the early part of the twentieth century,

[1] See pp. 22-23, 32-33.

was seriously interrupted by the World War and its subsequent disturbances. Prices unprecedented in our experience caused caution to be thrown to the winds. Moreover, rising prices and increasing profits stimulated production and caused an enormous increase in the credit facilities serving the industry. In order to understand the effect of the war on our financial machinery, therefore, we must first discuss the course of prices and production in the industry. Consequently the present chapter is devoted to noting briefly the developments of the war period and observing what defects or difficulties it revealed and emphasized, as a means of understanding the present problem confronting livestock financing.

I. CATTLE

From about 1894 there had been a general downward trend in the number of beef cattle which was only partially offset by the increase of dairy herds. The relatively strong price situation resulting was somewhat accentuated by the reduction of output in 1912-13 as a result of rather widespread droughts. Hence, prices were relatively favorable at the outbreak of the war in 1914 and continued on the whole to rise moderately until late in 1916. From about the time of our entry into the war in 1917 the advance in beef prices was sharp—at times almost perpendicular. It is interesting to follow the course of prices from 1917 to 1920 in some detail.

The table on page 83 presents price figures month

by month and brings out vividly both the time at which and the violence with which price changes took place:

AVERAGE PRICE PAID TO PRODUCERS FOR BEEF CATTLE IN UNITED STATES *

(Dollars per hundredweight)

Nov.	1916	6.44	Feb.	1918	8.55	May	1919	10.84—(High)
Dec.	1916	6.56	Mar.	1918	8.85	June	1919	10.20
Jan.	1917	6.86	Apr.	1918	9.73	July	1919	9.96
Feb.	1917	7.36	May	1918	10.38	Aug.	1919	9.82
Mar.	1917	7.91	June	1918	10.40	Sept.	1919	9.02
Apr.	1917	8.57	July	1918	10.07	Oct.	1919	8.65
May	1917	8.70	Aug.	1918	9.71	Nov.	1919	8.65
June	1917	8.65	Sept.	1918	9.63	Dec.	1919	8.63
July	1917	8.30	Oct.	1918	9.33	Jan.	1920	8.99
Aug.	1917	8.17	Nov.	1918	9.14	Feb.	1920	8.98
Sept.	1917	8.40	Dec.	1918	9.28	Mar.	1920	9.08
Oct.	1917	8.35	Jan.	1919	9.65	Apr.	1920	9.20
Nov.	1917	8.21	Feb.	1919	10.02	May	1920	8.97
Dec.	1917	8.24	Mar.	1919	10.34	June	1920	9.32
Jan.	1918	8.33	Apr.	1919	10.81	July	1920	8.93
						Aug.	1920	8.56

* U. S. Department of Agriculture, *Yearbook*, 1922, p. 822.

The war produced a revolution in beef cattle prices. The rise did not start until late in November, 1916. It will be observed that after a more or less steady advance the peak was reached in May, 1919. The succeeding decline was not precipitate or extraordinary in view of the fact that the major slump occurred from August to December, which is normally a period of falling prices. After this decline there was an increase until June, 1920, when the peak reached was between the August and September, 1919, level.

Fat cattle prices did not follow the exact course

of general cattle prices. The table on this page shows the rise of prices of "good beef steers" in Chicago. This market is selected since to it the bulk of well-fed Corn Belt steers are sent.

MONTHLY AVERAGE PRICES OF "GOOD BEEF STEERS," CHICAGO*
(Dollars per hundredweight)

Jan.	1916	8.35	Aug.	1917	12.70	Mar.	1919	16.05
Feb.	1916	8.35	Sept.	1917	13.10	Apr.	1919	15.85
Mar.	1916	8.75	Oct.	1917	11.70	May	1919	15.00
Apr.	1916	9.10	Nov.	1917	11.10	June	1919	13.55
May	1916	9.50	Dec.	1917	11.40	July	1919	15.60
June	1916	9.85	Jan.	1918	12.10	Aug.	1919	16.45— (High)
July	1916	9.25	Feb.	1918	12.00	Sept.	1919	15.50
Aug.	1916	9.45	Mar.	1918	12.60	Oct.	1919	16.15
Sept.	1916	9.40	Apr.	1918	14.70	Nov.	1919	15.10
Oct.	1916	9.75	May	1918	15.40	Dec.	1919	14.35
Nov.	1916	10.15	June	1918	15.85	Jan.	1920	13.95
Dec.	1916	10.00	July	1918	16.05	Feb.	1920	13.05
Jan.	1917	10.15	Aug.	1918	15.75	Mar.	1920	13.10
Feb.	1917	10.50	Sept.	1918	16.00	Apr.	1920	13.30
Mar.	1917	11.25	Oct.	1918	14.80	May	1920	12.25
Apr.	1917	11.75	Nov.	1918	15.05	June	1920	14.95
May	1917	11.90	Dec.	1918	14.90	July	1920	14.68
June	1917	12.15	Jan.	1919	15.80	Aug.	1920	14.30
July	1917	12.35	Feb.	1919	15.95	Sept.	1920	14.95
						Oct.	1920	14.61

* *Drovers' Journal Yearbook*, 1924.

The average monthly price during 1916 was almost one dollar above 1915; but the rise was rather gradual and there was nothing startling in the action of the market. Undoubtedly the general stirring of industry and the increase of exports was already being felt. Starting in January, 1917, the advance was constant, with a spurt in 1918, establishing levels which were maintained practically to the end of 1919. A reaction occurred during the

winter of 1920, but beginning in June the market braced, and held a level above that of December, 1919. Since fat cattle tend to be higher in the fall, this strength was probably due in part to the seasonal factor but nevertheless, it is to be considered in the cycle of 1917 to 1920 as marking the culmination of the World War inflation period of fat cattle prices.

A search for the underlying reasons for the price increase of this period reveals the fact that there was some increase in the domestic consumption of beef and veal. In 1917 the consumption of these two products increased about four pounds per capita. In 1918 there was an additional jump in per capita consumption of beef and veal of five pounds. There was also the influence of lavish government calf buying during the war. One of the most important causes was the great increase in exports, which had been declining for a decade prior to the war. The following table shows the effect of the war upon the export of beef products:

EXPORTS OF ALL BEEF PRODUCTS COMBINED*
(Pounds)

Year Ending June 30	Total Exports
1913-14	145,955,000
1914-15	378,281,000
1915-16	439,068,000
1916-17	405,087,000
1917-18	583,465,000
1918-19	561,194,000

*U. S. Department of Agriculture, *Yearbook*, 1924, p. 868.

This increase in exports and consumption required a larger feeding program, which was reflected in larger shipment of stockers and feeders back to range and Corn Belt. In 1917 the number of stocker and feeder cattle going back to the country increased by a million head over the preceding year, and in both 1918 and 1919 there were additional increases of a quarter of a million head of stockers and feeders purchased to go on feed.

Cattle prices would undoubtedly have reached even higher levels had not the Government insisted on curtailed home consumption. Meatless days and meatless meals were established by the United States Food Administration. Meat substitutes of every kind and description were urged upon the people. The response, in an endeavor to terminate the war as soon as possible, was decidedly enthusiastic and generous.

Strenuous efforts were made to stimulate the production of cattle. War had hardly been declared when an exhaustive program was initiated to stimulate the breeding of cattle. A circular issued by one of the well-known cattle loan companies early in 1918 reprints a special message from the United States Food Administration pressing this project. In this message it is stated that the maintenance of the cattle industry "is an imperative agricultural and military necessity." The opinion is also expressed that: "The Food Administration believes a study of international meat conditions will give

American producers a broad foundation on which to plan and build for the future." [2]

The nature of the requirements of export trade and army demand stimulated the production of heavy fat steers from 1917 to 1920. A dressed steer carcass weighing 750 pounds or more was required to fill the demands of these two sources. This interrupted a slight tendency which had existed before the war to feed younger cattle, and the older school of feeders were thus confirmed in the conviction that their contentions regarding the advisability of feeding the heavier cattle in contrast with the lighter ones had been justified. Furthermore, it was evident that any advance in price produced proportionately increased profits from the heavier animals. In addition, corn was high during most of this period, and a heavy steer usually carried considerable fat at the start and required much less time to fatten. There was in consequence a decided inclination in this period to feed steers weighing at the finish 1400 to 1500 pounds. The investment required on the part of a feeder to handle cattle of this type was enormous. For example, 100 head of 1200-pound feeder steers cost at many times during the period $15,000, or more. This demand in the Corn Belt for heavy steers was in turn reflected in premiums for the heavy feeder on the range, and young cattle were held for the maximum maturity.

In addition to the patriotic motive, normal eco-

[2] See Appendix B.

nomic tendencies were operating to increase production. Rising prices were attracting new men into the industry, and expanding credit facilities were assisting in making added production possible. As a result the production figures climbed, as shown by the tables on this page.

NUMBERS OF CATTLE IN THE UNITED STATES, 1915-1920 *

Year	Cattle other than Milch Cows	All Cattle
1915	37,067,000	58,329,000
1916	39,812,000	61,920,000
1917	41,689,000	64,583,000
1918	44,112,000	67,422,000
1919	45,085,000	68,560,000
1920	43,498,000	67,211,000

* U. S. Department of Agriculture, *Yearbook,* 1922, p. 819.

Market receipts increased enormously over the 1915 level which, however, was a little below that of the preceding five years.

CATTLE AND CALF RECEIPTS AT ALL MARKETS, 1915-1920 *

Year	Head
1915	14,553,000
1916	17,676,000
1917	23,066,000
1918	25,295,000
1919	24,623,000
1920	22,197,000

* U. S. Department of Agriculture, *Yearbook,* 1922, p. 833.

During a considerable part of this time the cattle feeder was constantly beset by periods when in spite of what seemed high prices cattle failed to sell in

a profitable ratio with corn. From January, 1916, to July, 1916, the ratio of cattle to corn was high, reaching a point where 100 pounds of good beef steers were worth approximately 13¼ bushels of corn. The ratio fell steadily from this point as the result of an advance in corn prices greater than that for cattle until, in November, 1917, 100 pounds of good beef steers would buy only 5 bushels of corn. A general rise extended from this point until January, 1919, when the ratio price was 12¼ bushels. It fell to below 8 bushels in May, 1919, rose to over 11 bushels in October, 1919, and again fell to approximately 6 bushels in May, 1920. Of course the significance of these ratios in particular months varies considerably owing to the fact that corn is ordinarily produced or purchased by the feeder some months in advance of the time at which finished steers are sold. Hence if the trend of prices of the two commodities is in opposite directions, the effect of this lag may be either to accentuate or to neutralize the rate of gain or loss indicated by figuring the ratio of prices at the time steers are sold. But even making allowance for this fact, it is evident that, owing to a disproportionate increase in prices of feed and in other expenses cattle feeders did not obtain profits as large as the high prices of cattle and beef would appear to indicate.

Cattlemen were thrown off their guard by the secondary advance in fat cattle prices in the fall of 1919. A slump in the middle of the summer of that

year [3] had, for the time, the effect of creating some conservatism, but when this decline was quickly reversed and prices advanced even higher than they had been previously, it naturally occurred to many that cattle prices might not after all decline permanently to any considerable extent. The memory of high profits was fresh in the minds of the cattlemen, and under the influence of this an added stimulus was given to the production of both range and fat cattle.

During the years 1917 to 1920 there was an enormous development of cattle financing in the United States. During the preceding years of prosperity, cattle paper had become very popular and enjoyed an almost limitless market in the Eastern banks, where it was regarded as an excellent secondary reserve. The absurd ease with which cattle paper could be sold is illustrated by the experience in the autumn of 1919 of a new cattle company the name of which was not even known in investment circles. Without the use of any salesmen, without sending a wire, or making a telephone call, this company sold to banks, by means of a single circular letter, over $300,000 of cattle paper and received future orders for an even larger amount.

Livestock loan companies were organized not only in such cities as Omaha, Kansas City, Sioux City, St. Paul, Denver, Oklahoma City, Wichita, Des

[3] Due to the marketing of herds from the drought-stricken sections.

Moines, and Cedar Rapids, but also on the Pacific coast and in scores of smaller towns throughout the western part of the country. In Des Moines eight or ten companies were organized with a capital stock of from 1 to 5 million dollars, with at least one part of their activities represented to be the making of cattle loans. Some of these companies were organized by promoters whose chief, if not only, interest was in the commissions derived from the sale of stock; and others were organized by private capitalists who were lured by the prospect of large profits.

The methods used in promoting these companies were usually as follows: two high-pressure stock salesmen working together would select a banker in a town and sell or give him a few shares of stock. With the banker a stockholder, almost anyone could be interested, especially since the entire transaction was usually financed by notes. The banker "shaved" the note, which represented the stock salesmen's commission, and the remaining obligations were turned in by the salesmen to the company which they represented. It was freely affirmed that the profits would pay for the investment. Sales of $10,000 to one person were common; $25,000, $50,000, and even $100,000 or larger were actual transactions in hundreds of cases.[4] Many

[4] The following incident represents an actual occurrence in Iowa late in 1918 and 1919. It is somewhat extreme but not unique, and the same sort of thing happened on a lesser scale daily.

In 1918 a certain livestock feeder was estimated to be worth net

bankers in assisting these stock salesmen even went so far as to give a list of prospects with the amount of money on deposit or in savings accounts, or the amount of liberty bonds the victims owned. Many bankers actually interviewed the prospects with the salesmen. In some communities, however, the bankers took a passive attitude and lessened the amount of harm accomplished. In others the bankers took a firm and militant stand against these salesmen. In such cases the promoters sometimes left for more lucrative fields; though they often succeeded in inducing a leading politician, cattleman, or farmer to act as "bell-wether" or "bird-dog" as the phrase commonly went in the Middle West.

Practically all cattle loan companies literally went on an economic spree. Lax methods and generous loaning policies became the rule. It started with the less conservative companies and spread in some

$75,000, owning 520 acres of well-improved, fertile land. His indebtedness at that time was about $40,000, involving an annual interest outlay of $2,000. During the year he increased his land holdings by 193 acres. Two months later some "high pressure" salesmen sold him $115,000 of stock in an investment and cattle loan company being promoted by some influential bankers. Forty thousand dollars was loaned him on the stock as collateral. This was mostly invested in 280 acres of land. To complete the payment for the stock a second mortgage of $75,000 was given covering all his land holdings of approximately 1,000 acres.

It was promised that the dividends on the stock would in a few years pay for the farms. Three weeks after purchasing the stock a dividend of $806 was received, but that was the end. Later someone completed the burial of the cattle loan company and the feeder struggled hopelessly with an interest budget of over $14,000 annually. About $9,000 of this interest was caused by the investment in stock.

extent to all. Caution and business methods often became a sham. Every company was eager to secure the maximum amount of business and therefore hesitated to reject an application for a loan even though it did not measure up to standards that should have been required. Strength of character, stability, and experience of the borrower were not given much consideration. Too often a man was assumed to be honest when in normal times a thorough investigation would have brought out the real facts. Inspections were often dispensed with and, if made, were half-hearted and perfunctory. Many loans were made as they had been in the eighties on the basis of the ranchman's "figures in the book." These figures were based on the number of the original herd, plus additions by purchase and calf crop, less any cattle sold. Death losses were either not considered or were estimated to be very nominal, whereas they often proved later to be 25, 30, or even 40 per cent of the number of cattle supposedly in the herd.

Some of the older companies at least made a pretense of caution, and refused to deal with unknown borrowers. Even here, however, little attention seems to have been paid to the fact that they were loaning at two and three times pre-war values. They allowed themselves to be carried along with the hysteria of the times and became far too optimistic. Loans were made for all or practically all of a vastly increased valuation. Loans were even urged

on customers either to buy more cattle or to make herd, ranch, or farm improvements.

Banks in the Corn Belt and on the ranges also extended credit in a lavish manner. The optimism of the post-war era seized the banks as well as the cattlemen. On the rising scale of values loans were regarded as indubitably safe, and it was easy under such conditions to fall into lax methods. Funds were plentiful and loans were extended to many men who were entitled to none; large lines of credit were given to others who could safely manage only a small enterprise. The number of banks also multiplied rapidly, often launched under the management of inexperienced or incompetent men who were willing to pay as much as 5 or even 6 per cent on savings and who extended loans with little reference to the ordinary principles of sound and conservative banking management.

This abundant and misapplied credit led to a great deal of speculation. Herds were contracted for in advance of delivery dates merely to collect the expected advance in price before that time. Ranchers and feeders vied with each other for an opportunity to purchase available stock. Herds were often sold many times between contract date and delivery date, and occasionally were traded over and over without moving beyond the state where they were produced. Heavy cattle, we have noted, were the most popular because they had the highest value on the markets and because on these the larg-

est profits were possible. Even after stock reached the markets, where in normal times they would have been slaughtered or at least moved eastward through the feed lots, they often went back to the range states for more grazing.

Not all of the money loaned cattlemen, by any means, was utilized in the purchase of more cattle. Some was diverted to build fine homes, and for modern improvements on an excessive scale. This was especially true in the case of new loans on breeding herds based on the advanced scale of values compared to that on which the former loan had been calculated. Some of the money went to purchase equipment such as windmills and engines, and build fences and reservoirs, all of which were selling at many times their former prices. Some money went to purchase automobiles; some went into land; and some was squandered, as is always the case when prices are booming. A considerable amount went into stocks of little or no value. On the whole, however, a large part of the loans went to purchase more cattle. A part of the profits made from the preceding herd that had just been sold, went as a margin into the purchase of a new herd at prices constantly in advance of the last transaction. In such cases, in the end, a constantly "pyramided" set of profits had been invested in a herd of cattle whose price had been increasing in step with the swelling profits. All that the rancher had to show for the apparently enormous profits was an equity in

a herd of cattle priced at a figure far beyond anything ever known before.

II. SHEEP

When the war broke out in Europe in 1914, the farm price of sheep in the United States was hovering around the average of the preceding five years, or about $3.77 per head. From this time until the collapse in 1920, prices advanced regularly except for a brief relapse in 1919.

FARM PRICES OF UNWASHED WOOL IN THE UNITED STATES, 1917-1920 *

(Cents per pound)

Month	1917	1918	1919	1920
January	31.8	58.1	55.2	53.3
February	32.7	57.1	51.1	52.5
March	36.7	60.0 (High)	51.3	51.5
April	38.8	60.0 (High)	47.9	51.3
May	43.7	58.2	48.0	50.3
June	49.8	57.4	50.5	38.6
July	54.3	57.5	51.8	29.5
August	54.8	57.4	52.2	28.3
September	54.2	57.7	51.3	28.0
October	55.5	57.7	50.6	27.5
November	55.9	56.4	51.0	24.9
December	58.2	56.2	51.6	21.9

* U. S. Department of Agriculture, *Yearbook*, 1924, p. 956.

Wool prices rose to extreme heights during the World War. There was a gradual advance in raw wool prices during 1914-15 and until our entry into the war in April, 1917. During this period the price had advanced from 15.7 cents per pound to 38.8

cents in April, 1917. Our entrance into the conflict immediately excited the wool market to such an extent that there was a jump of 15.5 cents in prices between April and July. Prices reached a peak in March and April, 1918, but were well sustained until June, 1920. The exact course of raw wool prices is shown in the table on page 96.

The price of sheep always depends in a large measure on wool values. Thus we find that sheep advanced from 1914 to 1920 but always behind wool and with prices rising to a lesser extent. The average farm value increase in dollars per head was as follows:

1914	$4.02	1916	$5.17	1918	$11.82
1915	4.50	1917	7.13	1919	11.63

The decline in sheep production in the United States undoubtedly contributed to the rising prices. For some time numbers of sheep had been falling. In 1917 there were only 47,616,000 sheep compared to an average of 53,202,000 for the five years from 1909 to 1913.

In addition, several of the factors influencing cattle prices also affected sheep prices. These included the advancing scale of all commodity prices, as well as government purchases on an extravagant scale. It embraced speculative buying on the ranges. Speculators contracted unborn lambs and the wool still on the sheeps' backs. There was a mad rush to share the anticipated profits. All this competi-

tive bidding, which had little connection with fundamental conditions, was certainly a great stimulus to prices.

There was an unusual expansion in the sheep feeding industry which contributed to the general rise in sheep prices. Stocker and feeder shipments from the markets reveal the trend here. They were as follows:

1916	3,277,000	1918	5,208,000
1917	4,448,000	1919	6,956,000

Scores of feeders handling one double deck in the Middle West expanded to two and three doubles. Feeders handling 10,000 head increased this number to 25,000. Top prices per hundredweight for fat lambs in Chicago from Colorado feed lots indicate the advance in prices that tempted this course of action.

PRICES OF FAT LAMBS IN CHICAGO*

(Dollars per hundredweight)

Year	January	February	March	April	May
1915	8.70	9.60	10.10	11.15	11.85
1916	10.90	11.50	11.90	12.00	12.90
1917	14.35	14.90	15.50	17.40	20.60
1918	17.85	17.75	19.50	22.10	21.10
1919	....	19.00	21.00	20.50	20.50
1920	21.25	21.25	20.70	21.75	21.25

* From *Chicago Daily Drovers' Journal Yearbook,* 1925, p. 65. Marketings from the Western feed lots are usually over by June each year.

Another factor with an important bearing on prices at this time as well as on later events was

the belated rush of inexperienced operators into the business in 1919. The Corn Belt and Middle West furnished a large number of buyers in this period who had little or no experience in handling sheep. They were, of course, lured by the prospect of enormous profits.

Abundant credit and generous loaning policies aided the upward price trend. In general, banks and loan companies financing the sheep industry followed the same course as those organizations serving the cattle industry. In the West several new loan companies were organized, and some smaller ones undertook enormous operations to finance the industry on the new scale of values. Unbusinesslike methods and gross carelessness were often the rule of management. The sole idea seemed to be, "get the business." Solicitors operating on a commission basis were often interested solely in the size of the loan possible to negotiate.

Under such conditions many individuals expanded their activities and extended their operations beyond the point where efficient control, management, and distribution of risk was possible. Not only were inspections and actual counts dispensed with, but the agents of these meteoric organizations often persuaded a rancher to falsify his book count.[5]

[5] An incident is told of an Idaho Basque sheepman. His banker noticed a chattel mortgage given by him put on record covering 30,000 ewes. A few days later while in the bank he asked about the matter as he knew the Basque owned only 15,000 ewes. Admitting that such was the case the borrower stated that the loan agent wanted it made for 30,000 head as the larger loan was

Such irregular practices were of course not the rule but they were certainly not infrequent. Furthermore they were indicative of the spirit of the times. It was only natural therefore, that the established and saner institutions should in a measure be led into practices which under normal conditions would never have been considered.

During this period the cost of range production mounted rapidly. All the elements making up the cost of producing the year's clip and lamb crop—labor, feed, grazing fees, and interest—increased on account of higher valuations. The total expense of carrying a range sheep rose from $2.11 in 1910 to an average of $8.30 in 1918-20.[6] This, of course, offset a considerable part of the absolute rise in prices.

A glance backward over this period of less than four years shows that the World War violently disturbed price levels and production practices in the United States in both the cattle and sheep industries. It also expanded the production of cattle. To an increasing overhead was added an enormous indebtedness on flocks and herds based on the vastly augmented scale of values. This rise of prices was made possible and abetted by an expansion of credit

looked upon more favorably by the loan company, and promised the borrower that to make the mortgage read 30,000 head was just a matter of form.

[6] "The Sheep Industry," U. S. Department of Agriculture, *Yearbook*, 1923, p. 269.

facilities for the industries by generous loaning policies, and by a general extension of credit to incompetent borrowers and to others in unwarranted quantities. There seemed to be at the start of 1920 little anticipation of trouble, and no preparations were made to meet exigencies, either on the part of credit agencies or producers. Thus the stage was set for the post-war events about to transpire.

CHAPTER IV

THE COLLAPSE OF PRICES AND CREDITS, 1920-1921

The data and discussion presented in the preceding chapter show that there was a rebound of livestock prices following the initial decline in 1919. As a result, cattle and sheep producers were lulled into a feeling of false security which made the collapse of prices in 1920 all the more disastrous. This final crash came with such suddenness, and prices fell so precipitately, that there was practically no opportunity to make any preparations for the changed conditions. The failure to read even such warnings as there were and to begin preparations for the coming storm, together with the magnitude of the price disturbance itself, accounted for the nature and severity of many of the succeeding problems.

In the present chapter we shall examine events between late 1920 and late 1921 from the following angles: (1) the chief causes contributing to the price decline in cattle and sheep; (2) the extent and significance of this fall; and (3) a brief indication of the effect of certain credit policies adopted by finan-

cial institutions serving the industry. Before examining the more specific conditions in each branch of the industry, it is pertinent to observe some factors which contributed materially to the general agricultural price decline. We can then see how these general influences, together with special conditions in the cattle and sheep industry, affected prices in these two branches of livestock production.

I. GENERAL PRICE TRENDS

One factor of major importance contributing to the general agricultural decline was the enormous drop in the purchasing power of European buyers. "Our war-time trade in farm products was determined by a European market whose consumptive demands were grotesquely enlarged by the underproduction and over-consumption brought about by intense and widespread war conditions. It was highly abnormal also, in that European buying power was artificially enlarged by the devices of war-time finance. Transactions were not limited by the ordinary practices of payment from current income, but the accumulated wealth of the past was drawn upon and the hopes of an extended future period were mortgaged through enormous borrowing operations." [1]

This abnormal factor in the European demand for American agricultural products continued for approximately a year and a half after the end of

[1] Nourse, *American Agriculture and the European Market*, p. 62.

the war. The strong market in the war-torn countries during this period, when they were readjusting their domestic problems and preparing to increase again their internal production to a normal figure, was supported by additional loans from the United States to various powers. The total of loans to our war-time allies was approximately one billion dollars during 1919. In addition to this amount of credit used chiefly to finance the exportation of American agricultural products, "American business men exported commodities on what were presumed to be short-term commercial credits." [2] Thus the stimulus given to general business, and especially to agricultural industries, by this continued export movement was very considerable.

Government loans to foreign powers largely ceased at the end of 1919, and thus the entire burden of financing American exports fell upon the exporters and their bankers. It was evident by this time that the enormous amount of obligations made to private exporters would be very slow in liquidating; in many instances they already appeared to be of little worth. The ability of any country to purchase American products began to depend again entirely upon its ability to produce a current exportable surplus with which to pay for these imports. Furthermore, there was an energetic movement on the part of practically all European powers

[2] Bass, J. F., and Moulton, H. G., *America and the Balance Sheet of Europe*, p. 304.

to make an effort to balance their budgets, to reduce imports to the minimum, and to increase the volume of their exports.

All these factors combined to decrease materially and very suddenly the volume of our export trade in livestock products. In examining the export periods ending June 30, for example, the following comparisons are significant: the exports of fresh beef dropped from 332,205,000 pounds in 1918-19 to 153,561,000 pounds in 1919-20, and to 21,084,000 pounds in 1920-21. The total exports of all beef products dropped from 591,302,000 pounds in 1918-19 to 203,815,000 pounds in 1920-21. Pork and all pork products dropped from 2,704,694,000 pounds in 1918-19 to 1,522,162,000 pounds in 1920-21. The total value of exports of meat and meat products dropped from $985,011,330 in 1919 to $449,015,777 in 1920, and to $287,070,966 in 1921.[3]

[3] Clemen, *The American Livestock and Meat Industry,* p. 302. Such a decline in the physical volume of exports was not equally marked in all agricultural lines. The index number of volume of agricultural exports prepared by the United States Department of Agriculture (*Crops and Markets,* Supplement, October, 1924) shows a decline from 145 in the fiscal year ending June 30, 1919, to 134 in 1920, and to 127 in 1921. While the index for cattle and meat products dropped from 287 to 185 and then to 154 during this period, the figures for grain and grain products stood at 272, 218, and 329, respectively. The mere fact, however, that volume of exports was maintained in the cereal group does not mean that they were protected from a price decline. In the face of the impaired purchasing power discussed above, several very large crops had to be disposed of at sacrifice prices. While such food bargains were a boon to the impoverished European buyer, their effect on the distressed American producer was disastrous during the period in which, partly because of the slowness of his own readjustment and partly because of weather conditions, production outran profitable demand.

The general accumulation of stocks had a very important bearing upon prices, particularly of agricultural commodities. A very considerable supply of food products, clothing, and other supplies had been accumulated by the government, on the assumption that the war would last beyond 1918. On account of the difficulties of transportation and the closing of regular European channels during the war, large stocks, particularly of food products, had also accumulated in Australia, Argentina, and other South American countries.

At the time the war ended, packing plants in the United States were working to the utmost of their capacity. Additions to plants had been built or were being built, and new plants in some sections of the United States were under construction, assuming as all did that the war would last at least another year. Packing-house products of all kinds had accumulated everywhere in this country as well as in the hands of packer agencies in foreign countries. American packers were not protected by contracts or guarantees by the Government as was the case in a great many other industries. Thus the sudden elimination of further government orders came at a time when cold storage stocks of meats in the United States were very near their peak. For example, the average monthly cold storage holdings of beef products in the United States in 1916 was 119,287,000 pounds; the average in 1920 was 169,121,000 pounds; the average holdings of pork in the

United States in 1916 was 547,276,000 pounds, and in 1920, 783,736,000 pounds. In addition, the packers found themselves with enormous stores abroad for which an outlet had to be procured.[4]

In addition to the stocks of goods accumulated by governments and others, as already noted, there was an enormous accumulation of stocks on the part of the public in general. It seems certain that manufacturers, wholesalers, jobbers, and retailers everywhere had bought considerably in advance of their actual needs in anticipation of further expected advances in the market. Private individuals, in an effort to protect themselves against the constantly increasing cost of living, bought supplies, particularly food products, sufficient in many cases to serve their major needs for several weeks or months in advance.

The widespread adoption of a policy of loan contraction by banks aided materially in forcing down values. As fundamental conditions began to change, it became evident to national financiers that credit had been distributed on far too generous a basis. The limits of expansion on the part of the

[4] The immediate situation abroad in February, 1920, was reported by the Institute of American Meat Packers as follows: In the United Kingdom it was estimated that there was at the then rate of movement the equivalent of almost seven months' supply of meat in the hands of the British ministry of foods. In Germany American packers were unable to sell stocks already there, and were required to put these into cold storage. In Holland all sales had practically ceased, and it was recommended that lard and pork stocks be returned to the United States; the same situation existed in Scandinavia. See Nourse, *American Agriculture and the European Market,* p. 70.

Federal Reserve Banks were about reached. So quickly did prices recede that margins in loans disappeared as if by magic. Deposits began to shrink, and terror displaced the care-free generosity displayed by bankers a few months previous. Federal Reserve Banks pressed member banks to liquidate their rediscounts as speedily as possible. City banks were even more insistent that their correspondents retire their borrowings with all dispatch.

This movement to retire indebtedness, starting at the top of the financial system, gathered momentum as it traveled toward the country bank and the individual borrower. Even those relatively few local banks which had no rediscounts were either compelled by conditions or were animated by motives of self-preservation to reduce their notes receivable just as fast as possible. Warehoused products, both agricultural and non-agricultural, were turned over to banking institutions by borrowers who had pledged them as direct collateral for loans.

Farm product prices soon became demoralized by the frenzied efforts of all these several agencies to dispose of their holdings. Individual producers were endeavoring to sell their property to retire bank loans. Packers were attempting to distribute their surplus stocks and handle at the same time continued heavy marketings. Government agencies were seeking to realize something on their unnecessary supplies. Banks dumped collateral right and

left in an effort to realize on notes and either escape loss or reduce it to a minimum. Any consumptive channel was utilized if it seemed to offer a market at any price within reason. But such channels became choked, and the cumulative effect of all the factors converging on the market was a drop of more than 55 per cent in the prices of farm products within approximately one year. Based on a weighted average, the price of all major farm products stood at 241 (taking the 1910-14 average as 100) in June, 1920. By June, 1921, this had dropped to 108, as set forth in the following table.[5]

INDEX PRICE OF MAJOR FARM PRODUCTS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920	...	...	...	...	...	241	239	244	205	192	172	147
1921	138	132	126	116	110	108	...	...	...	...	...	...

At the same time the index of wholesale prices of all commodities, as compiled by the U. S. Bureau of Labor, using the average of 1910-14 as 100, dropped from 248 in June, 1920, to 145 in June, 1921.

Such was the general background of a period in agricultural history and particularly in livestock history unparalleled by any other era. The conditions peculiar to cattle and sheep may now be analyzed.

[5] Warren and Pearson, *The Agricultural Situation,* p. 65.

II. CATTLE PRICES AND CREDIT CONDITIONS

It was very unfortunate that apparently all the adverse forces of nature combined to assist the other factors already at work in undermining the foundations of the cattle industry. In the Southwest a drought began in 1916 and lasted almost without interruption until the early spring of 1919. The expenses of production accordingly mounted far above what should have been expected even with the high cost of all the elements involved. In some cases the expenses were larger than the loans themselves before final liquidation was attempted. One loan company reports a not unusual incident where on an original loan of $35,000 a total of $36,500 was spent for feed. The situation in the Southwest became so acute in 1918 that loan agencies were established in Kansas City and El Paso by the War Finance Corporation, and during this year and the succeeding winter approximately $8,000,000 was advanced through loan companies and banks largely to assist in the purchase of feedstuffs.

In addition, these natural conditions prevented aged steers from fattening, and thus marketings of this class of cattle during this period were at prices far below what they would normally have been under the general conditions of the market. Coupled with this, there was considerable "distress" marketing during 1918-19. Cow herds suffered enormous losses in numbers, and the calf crops of the average

herds were below normal. The calves themselves in many instances, especially in the more arid sections, developed into little more than "dogies." [6]

It is true that the drought in the Southwest was broken early in 1919. During that year some advantage accrued to the producers there, since they were able to market mature steers at relatively satisfactory prices. Cow herds, however, could not be rehabilitated and reconditioned so quickly, and the calf crops, particularly of the years 1917-18, never recovered from the drought through which they had passed.

In the Northwest what has been described as the most severe drought in the northwestern and intermountain states known to this generation occurred in the summer of 1919. Water was often unavailable, and the ranges were dry and bare. As a result it was impossible to market the usual crop of "grass-fat" steers in the fall. All cattle went into the winter of 1919-20 in a weakened condition. The hay crop that year was very short due to the drought, and all feed supplies were far below normal. In the face of these conditions a winter of almost unprecedented severity in that section followed in 1919-20. One organization operating an extensive ranch in Wyoming began feeding on the twelfth day of October, whereas in normal times this would not

[6] In the herd of the Matador Land and Cattle Company the number of calves fell from 16,280 in 1917 to 10,714 in 1919. In 1920 the number was increased to 17,066. See Clay, John, *My Life on the Range,* Appendix.

be necessary prior to January 1. Ordinarily, the necessity for feeding disappears about March 15, but in 1920 it lasted into May. In fact, much of the enormous death loss that occurred took place in April during storms which found the cattle with vitality too low to withstand them. Hay sold during this time as high as $40 per ton, and all sorts of desperate expedients were used to get feed to the cattle regardless of expense.

In the Corn Belt as well, conditions were shaping themselves to make the effects of the deflation which followed more disastrous. In the spring of 1920 there occurred a general strike on the railroads, of which the immediate result to the Corn Belt feeder was to make it impossible to obtain cars for shipping, except after days or weeks of waiting. Corn prices were very little below their peak, and an enormous feed bill had accumulated on every steer in the feed lots. A large proportion of the feeders were unable to ship when they desired and, as a result, often being out of corn, it was found necessary to purchase additional supplies at constantly advancing prices. Another serious factor involved in this situation is the fact that fat cattle really become less valuable when fed beyond a certain finish, as they become "over-ripe."

We have previously noted that the tendency on the part of feeders in general during the war had been to feed for heavier animals due in large measure to the premium on cattle suitable for export

and other purposes, and in particular to the desire to increase profits proportionately. This fact, as we shall see, had an important bearing upon the succeeding events.

Heavy marketings, decreased stocker and feeder purchases, and declining beef consumption prevented any check on falling prices. Marketings in 1920 were heavy when compared with the years prior to our entrance into the war. About 22,197,000 cattle were marketed in 1920, compared with 14,553,000 in 1915 and 17,676,000 in 1916. Stocker and feeder shipments declined 1,184,000 head in 1920, throwing that additional number of cattle into consumptive channels. At the same time the per capita consumption of beef and veal in the United States decreased from an average of 74.6 pounds for the years 1909-13, inclusive, to 65.7 pounds in 1919, 69.1 pounds in 1920, and 62.8 pounds in 1921. In addition, as previously noted, there was a marked decline of export demand.

The drastic deflation in cattle values started in the early fall of 1920. Prices paid to the producers of beef cattle fell almost perpendicularly, and by September, 1921, had reached a point below the prewar average. This decline is shown month by month by the table on page 114.

Feeders in the Corn Belt had purchased a large part of their 1921 supplies of cattle at high prices. It was almost October, 1920, before the full force of the decline in cattle began to be felt in stocker

and feeder circles. For this reason a large percentage of the cattle needed for the next season's feeding had already gone to the country. Naturally this increased the succeeding losses, which reached enormous proportions, particularly during the first six months of 1921. Steers that would have sold in Chicago for $15 per cwt. in January, 1920, sold at an average of $9.45 per cwt. the succeeding Janu-

PRICES PAID PRODUCERS OF BEEF CATTLE*
(Dollars per Hundredweight)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920	...	...	...	...	...	...	8.93	8.56	8.29	7.77	7.15	6.36
1921	6.32	6.02	6.36	6.08	5.98	5.65	5.40	5.39	4.98	4.81	4.69	4.62
1922	4.75	...	...	...	...	...	...	...	...	...	...	...

* Pre-war average $5.31, years 1910-14.

ary. This spread of $5.55 per cwt. increased to $7.45 by June compared to the current month of the year previous. It reached a maximum in September when prices were $8.20 per cwt. lower than September, 1920. During these 12 months many steers had cost their owners from $40 to $100 a head. The full significance of this decline is apparent when we observe that in 1921, 100 pounds of cattle would purchase fewer commodities than in any year since 1890. That year the average price of good beef cattle in Chicago was just a little above four cents per pound.[7]

Losses to feeders during the 1920-21 season were

[7] "Our Beef Supply," Separate No. 874, U. S. Department of Agriculture, *Yearbook*, 1921, p. 297.

enormous. The U. S. Department of Agriculture found in a study embracing about 100 average droves of steers in five Corn Belt states that an average price of about one cent per bushel was received for corn fed to cattle that season. Approximately one-half the cattle returned considerably less than nothing for the corn consumed.[8]

There were also losses to local banks financing Corn Belt cattle feeders, though in only few cases so severe as to impair their capital. There were taxes, interest, labor, and other expenses to be met. It had been expected that these would be paid out of the margins on the cattle. Since no return was secured for the corn fed, and since in many instances the cattle actually failed even to bring back what they originally cost as stockers, it became necessary for the banks to advance these needed expenses if the feeder was to continue operations.

The credit situation in the cattle industry became serious. By the fall of 1921 a great many local banks were not in position to make any considerable number of new loans. Those that could were not in the mood to finance cattle, although stockers and feeders below pre-war prices seemed certain to show a profit in view of the low-priced corn. The result was that the number of stockers and feeders purchased in 1921 decreased 1,782,000 head compared to 1919. Hundreds of feeders who would have purchased cattle could not get financing and thereby

[8] *Ibid.*, pp. 274-5.

missed such opportunity as this year offered of recouping the losses which they had been suffering. This was, of course, a matter of serious consequence to the entire industry.

In other branches of the industry the credit situation was perhaps even more alarming. Cattle paper was held in 1920 mainly by commercial banking institutions. If the loans had not been made by local banks or by correspondent banks in the stockyard centers, they had been made by cattle loan companies. These institutions in turn had rediscounted their paper with commercial banks in financial centers and with smaller banks who were paper buyers. It was only natural that one of the easiest types of loans for banks to start liquidating were those on cattle. Many banks were in need of funds to make advances for general production purposes. Deposits were shrinking so that some paper already in their files had to be retired. On account of the previous drought conditions, much cattle paper had been renewed more often than was customary. Thus it did not seem unreasonable to ask that those loans be paid. Here were loans covering specific property. Here was something tangible to sell that was convertible into cash instantaneously. In contrast, many of the unsecured loans held by the banks could not be met; neither could the interest be paid, since the borrower had nothing definite to sell at that time.

Banks that were carrying cattle paper as an in-

vestment for funds that had been idle began, accordingly, in 1921, to insist on payment regardless of conditions. It was apparent that margins were rapidly evaporating if not already gone. As the paper matured, the endorsing loan companies were required to redeem it. These demands came with such suddenness and in such large numbers that many of the cattlemen could not meet maturities except by the liquidation of herds. Some soon reached the point where they were unable to meet any of the demands made upon them on account of the failure of a large number of the herds to pay their encumbrance. As the situation progressed and an increasing number of institutions began to default on their endorsements or ask for additional time, a general hysteria developed among banks. Confidence almost entirely disappeared. All loans began to look alike. Some foreclosed on their collateral and threw it upon an already overburdened market, adding weight to the avalanche of receding values. Some literally grabbed added collateral of any kind, including second mortgages on ranches and chattel mortgages on horses, equipment, and the like.

III. PRICES AND CREDIT CONDITIONS IN THE SHEEP INDUSTRY

The sheep industry followed a course similar to that of cattle. There was a considerable liquidation of breeding sheep in 1919 that was of assist-

ance to banks and loan companies financing range sheep. This was undoubtedly caused in part by the drought of 1919 in the Northwest and the intermountain states. This drought, already noted as the most severe in that section in the history of this generation, did not affect sheep to the same extent that it did cattle. A considerable proportion of sheep are grazed in the forest reserves of the mountains in the summer, and droughts do not affect these areas as much as they do the valleys. It was clearly evident, however, that the hay crop was very short and that the cost of wintering an animal would be large. Therefore, the marketing was very heavy and at prices which proved to be very satisfactory later, although from $1 to $2 per hundredweight less than the previous year.

The cost of wintering proved to be even higher than anticipated, since the winter of 1919-20 was one of the most severe in many years in the Western states. Feedstuffs of all kinds were sold at the highest prices ever known and were almost unobtainable. Thus every loan company and bank with loans on breeding herds was forced to assist many of their customers financially in an effort to save their flocks. A heavy death loss and a decreased lamb crop in the spring of 1920 made it necessary to carry loans into 1920—often for amounts in excess of the 1919 loan and covering considerably less collateral.[9]

[9] As an illustration of the decreased lamb crop of 1920, the Swan

The drop in both sheep and lamb prices on the markets started at approximately the same time. The drop in prices for sheep, however, was more sudden than for lambs. The table below indicates the course of prices on native and Western sheep combined for the period in question.

AVERAGE MONTHLY PRICES OF NATIVE AND WESTERN SHEEP COMBINED, AT CHICAGO *

(Dollars per hundredweight)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920	...	...	...	14.20	12.25	8.50	8.90	...	6.85	6.45	5.75	4.70
1921	4.95	4.75	5.80	6.45	6.25	4.60	5.40	4.75	4.10	...	...	...

* *Chicago Daily Drovers' Journal Yearbook*, 1925, p. 59.

The fall in lamb prices over the same period is shown in the table below.

AVERAGE MONTHLY PRICES OF NATIVE AND WESTERN LAMBS, IN CHICAGO

(Dollars per hundredweight)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920	....	...	...	18.80	17.40	14.25	15.55	13.20	13.30	12.35	11.53	10.96
1921	10.72	9.07	9.91	9.69	11.07	10.67	10.09	9.46	8.86	8.66	....	....

One of the chief contributing factors to the price decline was the wool situation. The apparent consumption of wool in the United States dropped from 735,622,000 pounds in 1919 to 516,042,000 pounds in 1920. A slight gain in 1921 brought the figure to

Land and Cattle Company, Ltd., reported a drop in lamb crop percentage that year to 44 per cent. This was compared with a percentage of 66.7 in 1919 and 70.0 in 1921. From Clay, John, *My Life on the Range*, Appendix.

588,696,000 pounds. Stocks of wool in the hands of dealers and manufacturers on October 1, 1919, were larger than any previous period. In addition, there were enormous stores of woolen blankets, uniforms, and other army materials in the hands of the government agencies in this country and in Europe. The same situation existed in the majority of the warring countries. Concurrently with these conditions the total wool production of the world was larger in 1920 and 1921 than at any time since 1912. The significance of these conditions in the wool market was apparently not seriously considered until the early fall of 1920. Early in the summer one of the largest pools of western wool was contracted for at 70 cents per pound. Within a few weeks the wool market became demoralized to such an extent that bids of any sort were difficult to obtain and the prevalent price range for wool in the West that fall was 15 to 25 cents per pound.[10]

The official price range over the entire United States as reported by the U. S. Department of Agriculture indicates a drop from 50.3 cents per pound in May, 1920, to 27.5 cents in October of the same year. Many producers and co-operative companies held over the 1920 clip of wool and in 1921 found themselves with two years crop to sell. The decline continued steadily until prices reached a low point of 15.5 cents in September, 1921.

A second specific cause of the price decline in the

[10] Interview with Allen Wilson, Chicago, February 10, 1925.

sheep industry was the relatively heavy marketing. The total receipts of sheep at the 67 markets of the United States decreased in 1920 as compared with 1919. These were very large, however, compared with the years prior to our entrance into the war. They were, for example, 18,435,000 in 1915, 23,538,000 in 1920, and 24,168,000 in 1921. Moreover, stocker and feeder shipments from the markets decreased from 6,956,000 in 1919 to 5,180,000 in 1920, and to 3,095,000 in 1921. Therefore, the surplus ordinarily going into feeder channels was forced into immediate consumption, further depressing prices.

The demoralization of the lamb-feeding industry did not take place until the winter of 1921. Practically all range lambs on feed in the Corn Belt and in the feeding sections of Colorado, Nebraska, and other states, are marketed by June of each year. Prices on the whole had been satisfactory, and approximately equalled, in the winter and early spring of 1920, those of a similar period in 1919. As a result feeder lambs were contracted on the range and purchased at the markets in 1920 at only a relatively reasonable reduction below the 1919 contractings. But in February, 1921, the monthly average price per hundredweight in Chicago for fat lambs had dropped from $19.95, of the year previous, to $9.07. Top prices in Chicago the same months for Colorado lambs, which comprised the bulk of the supply, dropped from $21.25 to $11.00 per hundredweight.

The situation was so acute that a meeting was

held in Chicago between several of the major lamb-feeding operators in the United States and several of the packers. The packers outlined to the producers the situation in consumptive channels and stated that they were paying the maximum that could be paid under the existing conditions. One packer ventured the remark that he had 100,000 forequarters hanging in storage that he would be pleased to sell at three cents a pound.[11] To complicate the situation further, there was considerable importation in the spring of that year of Argentine and New Zealand carcasses amounting to about 10 per cent of domestic production. This meat came into competition more particularly with the lower-priced cuts of lamb which were already difficult to move. In an attempt to render assistance, some of the leading commission firms and others instituted an intensive program of advertising among several hundred Eastern houses distributing mutton products. The cheapness of mutton compared with other meat products, particularly the cheapness of particular cuts of mutton, was emphasized, and a general campaign urged "eat more mutton." As a result some improvement was noted.

Scores of large feeders emerged from the 1920-21 feeding season absolutely bankrupt. The losses of one of the larger operators is illustrative of the general operations of all. This particular feeder lost approximately $140,000 in the feeding of about

[11] Interview with Allen Wilson, Chicago, February 10, 1925.

40,000 head of lambs. Approximately one and one-half million lambs were fed in the northern part of Colorado alone. The official figures regarding stocker and feeder shipments from all the markets in the United States in 1920 total over 5 million head. These do not include an enormous number purchased on the range that never reach a market until fat. When every lamb was netting a loss of $3 to $5 a head as shipped during the first half of 1921, the losses to the feeders were certain to be heavy.[12] Furthermore, only a relatively small proportion of the large feeders were able to cover their losses with cash. Thus the loan companies and banks were forced to shoulder an enormous deficit with little apparent prospect of getting it back.

Bankers generally refused to finance feeders for the fall of 1921 *except at prices far below any possibility of trading.* Colorado bankers were insisting that lambs be purchased around four to four and a half cents at the range point. Even at these prices the majority were opposed to making any loans. In the Corn Belt, bankers largely refused to finance lambs on any basis. Emissaries from the range sections came direct to Iowa, Illinois, and Missouri, and

[12] A Missouri feeder tells of a personal experience of paying $12.25 per hundredweight for a double-deck car of lambs in October, 1920, and in 40 days selling the same lambs on the same market, after feeding them grain the entire period, for $6.25 per hundredweight. That it was not poor condition of the lambs that caused this decline was indicated by the fact that in that length of time the lambs made a phenomenal gain of 23 pounds per head.

offered choice mountain lambs at about seven cents per pound delivered to the customer. At this price there were few takers, as the majority could not have bought if the price had been but half as much, since the financing was not available.

This antagonism on the part of bankers to sheep loans so frightened many feeders who could have secured the money from some other source that they too were unwilling to buy. The writer spent several days interviewing Iowa feeders in September, 1921. Choice Idaho and Montana lambs were offered delivered in Iowa with all freight and transportation charges paid to Chicago for $7.25 per hundredweight. A loan at the prevailing rate for all the purchase price except the freight was also offered. On these terms there were relatively few purchasers and absolutely all of them accepted the credit offer. Furthermore, the majority were unable even to borrow the freight money from their bank and this had to be advanced as well.

Under such conditions, the only movement on the range was the marketing of flocks in "financial distress." Many banks and loan companies were in such a precarious condition that no course of action was open except to insist that the customer sell at any price offered. It might be said that a trading value on range lambs hardly existed. The price of aged sheep dropped to such levels that it was a common occurrence, not a matter of fiction, that the proceeds at the market were not sufficient to pay the

freight charges. The best young breeding ewes could be bought at $4 to $5 a head; these had formerly sold at $15 to $20 each. In the early fall of 1921, when these conditions were at their worst, the heads of one of the leading commission firms that ordinarily financed from 30 to 40 per cent of the lamb feeding of northern Colorado as well as large amounts elsewhere, made a trip into the lamb-feeding sections in an attempt to get the banks to cooperate on a plan of financing the feeders and of establishing a trading basis on lambs. His reception was cold. One banker stated: "You are going to keep on with this sheep game until you bankrupt this country."

The result of the trip, however, was as follows: the commission company agreed to loan its regular customers as long as its funds were available to purchase lambs at prices which the growers would accept (then about 5 to 5½ cents). It further agreed to finance the freight to Missouri River points and add one dollar per head to the loan to pay for feed. This course of action was based on the fact that world conditions indicated to this organization a recovery from the conditions then existing and that purchases at current prices, which were far below cost of production, were almost certain in view of those circumstances to prove profitable.

The action of this organization led other financial institutions to follow, and soon a healthy trade had sprung up in lambs on the range. Prices advanced

very gradually and, while disastrously low, at least dispelled the previous demoralization and made an orderly affair out of a riot. The organization pioneering in this movement financed 750,000 lambs in northern Colorado alone that year in addition to thousands in Nebraska, Iowa, Missouri, and Illinois. Some of the enormous losses of 1920-21 were recouped *en masse* in the single season of 1921-22. One feeder who had lost $140,000 in the previous year made $175,000 this season.

This incident graphically illustrates the influence of the adoption of a concerted credit policy on prices in the livestock industry. Here was a business practically dependent upon credit. Almost complete demoralization had followed the wholesale refusal of financial institutions to support it. Some of this stringent curtailment of credit had been due to a panicky sentiment developing among the bankers by the economic difficulties of the period, and they had not been inclined to return to the financial support of the industry as promptly as was justified by the general economic situation. The action of one large institution in assuming courageous and constructive leadership in this field spurred others to a policy of conservative assistance, and the revival and recuperation of the industry came promptly, furnishing conclusive evidence of its fundamental soundness and of the fact that it was entitled to moderate credit extensions. The leadership of a single institution based upon a care-

ful study of the underlying situation marked decisively a turning point in the affairs of the sheepmen.

Having surveyed the general conditions and the credit situation in the cattle and sheep industries as they had developed to the late fall of 1921, we may now turn to examine certain emergency measures of financial relief which were brought forward as a means of coping with this alarming situation.

CHAPTER V

EMERGENCY CREDIT AGENCIES

THE events portrayed in the preceding chapter reveal how the termination of war conditions in 1920 effected the most severe and sudden decline in prices ever known to the cattle and sheep industries. As a consequence, difficulties of a serious nature confronted the institutions financing the industry. Not alone were they short of funds, but the losses and prospective losses also brought with them a lack of confidence. Thus, in many cases, the cattlemen and sheepmen found themselves left with little or no financial support. So dependent upon credit are these two lines of production that any disaster which affects the credit institutions serving them disrupts the course of the industries themselves. Actual ruin was staring livestock producers in the face. So evident was the crisis, that certain emergency credit plans were put into operation in an endeavor to save at least the foundations of the business and bring order out of chaos.

The first of these special relief agencies was the "Livestock Finance Corporation."[1] For this enter-

[1] To be sure, the War Finance Corporation had, as an incident to its general activities, given some aid to livestock interests in

prise, $20,000,000 capital was subscribed, largely by Eastern bankers. Only a small amount of money was actually loaned, as the committee handling the loans insisted that no loans be accepted that were not eligible for rediscount with the Federal Reserve Banks. There was little paper at the time in condition to be eligible for rediscount with Federal Reserve Banks which was not already in their hands.

Out of this situation grew the Stock Growers' Finance Corporation, which began to operate in July, 1921. A capital of $50,000,000 was subscribed largely by banks in Boston, New York, Philadelphia, Chicago, and Kansas City. Mr. M. L. McClure, well-known and able cattleman and banker of Kansas City, managed the organization. Approximately $20,000,000 was loaned with losses so small that not only will all the original capital be returned to the investors but a small rate of interest will be earned in addition.[2]

On August 24, 1921, Congress authorized the War Finance Corporation to make loans on agricultural products. These could be made to banks, financial institutions, and co-operative organizations. Under the energetic management of Eugene Meyer, Jr., operations began immediately. Loan agencies were established in 36 cities. These were managed

1918-19. The Livestock Finance Corporation was, however, the beginning of emergency institutions designed especially for the relief of livestock producers.

[2] Statement of M. L. McClure, in interview, February 16, 1925.

largely by local bankers, who acted as a committee and passed on the applications and handled the submission of the loans to the Corporation. In order to make the risk as small as possible, the organization of new companies with fresh capital was encouraged by the War Finance Corporation. As a result, such companies were organized in many of the livestock centers. The capital was usually subscribed jointly by bankers, local business men, railroads, and sometimes by farmers and stockmen. In many instances the total capital was $1,000,000. Through these organizations the actual loans were made.

In September, 1921, several of these new companies for handling livestock loans were organized. The earliest companies were established in Salt Lake City, Cheyenne, and Denver, but soon afterward companies were formed in Fort Worth and Albuquerque. About the same time what were known as "farmer-banker meetings" were held in various parts of the country to acquaint stockmen and farmers with the general plan by which it was expected loans would be made. The War Finance Corporation made no loans direct to individual stockmen. Banks, furthermore, were naturally interested first in improving their own condition, and it is charged that little of the money they received went direct to the livestock men. Therefore, probably most of the money which did go to individuals was advanced through the medium of these new

loan companies set up in the various livestock centers.

The machinery by which funds were advanced to the cattle and sheep industries is well illustrated by the general organization plan of the Wyoming Stockmen's Loan Company of Cheyenne, Wyoming, and the Agricultural Live Stock and Loan Company of Fort Worth, Texas. A capital of over $1,000,000 was subscribed and paid in to the former of these companies. This capital was supplied by local business men in Wyoming, by bankers, railroads, and a few stock-growers. The company was organized September 29, 1921, the first loans going out immediately afterwards. At the start, in order to create an operating basis, a schedule was agreed upon in which the following values were arbitrarily established:

Cattle

3 to 4 year old steers	$50.00
2 year old steers	40.00
Yearling steers	30.00
2 year old heifers	40.00
Yearling heifers	25.00
Cows	40.00
Calves	15.00
Bulls	50.00

Sheep

Ewes, 1 to 4 years old	$ 7.00
Old ewes	2.50
Ewe lambs	4.00
Wether lambs	3.50
Bucks	10.00 to 12.00

In 1921-22 loans were made up to 80 per cent of these values. In the case of cattle loans, the mort-

gage often covered horses, hay, feed, and equipment as additional collateral besides the cattle themselves. In some cases, where the situation was distressing, an actual loaning scale of values was placed on good heavy horses. In 1923 the percentage of value extended on loans was reduced to 75 per cent, and in 1924 to 66 2-3 per cent.

Originally this company accepted applications for loans only when submitted through the borrower's bank. The chief reason for this was that practically all the loans which could be made were for amounts considerably less than the original encumbrance. Therefore, in almost every instance, some deficit was still due the bank. The resulting community of interest between the borrower's bank and the loan company making the advance often caused the bank to provide, if necessary, the running expenses for the herd or flock. The Wyoming Stockmen's Loan Company in turn agreed, as far as possible, to return from time to time a part of the proceeds of the sales of any mortgaged property to offset these expenses advanced by the bank. Under this arrangement, it was possible to make loans with a smaller margin of security, and in turn, the bank was able both to obtain badly needed funds for reserves and to retire rediscounts with their correspondents. The collateral back of the original loans could have been sold, it is true, but in that case the losses would have been enormous, so

very large in fact that few institutions could have absorbed them quickly.

During 1923-24 a large number of banks did fail. As a result, the responsibility of financing any feed requirements for the borrowers whose loans involved the failed bank, fell upon the loan company. It was for that reason that the percentage of loan value was reduced to a lower figure than originally established in 1921.

From October, 1921, to January 1, 1925, the Wyoming Stockmen's Loan Company obtained funds from the War Finance Corporation to the extent of over $11,000,000, after making deductions for all duplications. The peak of these loans occurred in July, 1922, when seven and a quarter million dollars were outstanding. The loans were made at 7.5 per cent interest to the borrower, a rate which allowed a spread of 2 per cent to the local company.

The Agricultural Live Stock and Loan Company of Fort Worth was organized in practically the same manner. The president of one of the large stockyard banks was induced to assume the management. No one was asked to subscribe to the capital stock who could not afford to pay cash for his subscription, and who, if the worst came to pass, could not afford to lose a large part or even all of his subscription. The dire necessity of the livestock industry in Texas was emphasized, and those who subscribed did it for the good of the territory, feel-

ing undoubtedly, however, that the losses would eventually be small.

When the doors of these organizations opened for business there was what might be termed a regular "bread-line" of applicants. It was evident that some system of transacting business quickly had to be devised. No organization was in existence, and to have perfected any orderly or well-regulated plan before starting to operate would have probably meant that by the time assistance arrived the situation would be beyond relief. At the beginning, therefore, loans were made without inspections by the representatives of the local loan companies. The inspections of bankers in the borrowers' community, of local stockmen, and of others who were recommended as reliable had to be taken. In some instances this confidence was misplaced; in others, inspections were honest but revealed a lack of experience and knowledge of fundamentals. For example, the sufficiency of feed and particularly the adequacy of watering facilities, was often overlooked. Also, inspections were commonly made simply on the basis of count, with no distinction between the ages of various animals, which is a very important factor in making loans on breeding herds or flocks. The losses, however, even from this makeshift plan of organization were very small in comparison to the volume of business transacted. The January 1, 1925, statement of the Wyoming Stockmen's Loan Company indicates that some

losses had occurred and had been written off from year to year as they developed. On that date, however, the entire original capital was intact and an undivided profit account of approximately $17,000 had been built up. It would seem that practically all of these companies will be able to return the entire original subscribed capital, and some of them will probably be able to show small or reasonably fair interest returns.

From the time the War Finance Corporation Act was amended in 1921 to November 30, 1924, a total of $93,059,309.24 had been advanced for livestock purposes. This money was loaned to banks all over the West, and to 114 livestock loan companies scattered over 20 states. In addition, enormous advances for general agricultural purposes were made to a great many banks included in the 4,317 banking institutions that obtained loans through the War Finance Corporation during this period. Of these 3,643 were state banks, of which only 213 were members of the Federal Reserve system.[3]

The outstanding loans on livestock carried by the War Finance Corporation were substantially reduced in 1925. On December 31, 1924, $17,652,465.52 of livestock loans were outstanding against livestock loan companies; while on November 30, 1925, this had decreased to $9,954,363.92.[4] The

[3] Seventh *Annual Report* of the War Finance Corporation, p. 5.
[4] Eighth *Annual Report* of the War Finance Corporation, p. 5.

improvement in cattle prices and the shifting of paper to the Federal Intermediate Credit Banks undoubtedly accounted for the rapid liquidation. While probably a considerable part of the remaining indebtedness can never be repaid, this unpaid portion will in the end be only a very small percentage of the total loans made on livestock by the War Finance Corporation.

The operations of the War Finance Corporation certainly were beneficial.[5] On the whole, the opinion of bankers and managers of livestock loan companies is that the benefits derived in livestock producing states by the operations of the War Finance Corporation were very great. The most important benefit was the injection of new strength into the moral fiber of livestock communities. Banks were being pressed by their city correspondents and by the Federal Reserve Banks to repay rediscounts. This they were largely unable to do, as we have noted. To many of them it seemed impossible to avoid the closing of their institutions. Livestock loan companies in some instances had been forced to suspend payment on rediscounts. Even if they were continuing to take up loans as due, when rediscounted, it was being done through assessments on directors or through drains on af-

[5] No attempt is made here to cover in detail the organization or operations of the War Finance Corporation. For a fuller discussion see Benner, Claude L., *The Federal Intermediate Credit System* (Investigations in Agricultural Economics, Institute of Economics, Washington), 1926.

filiated banks, as practically all had reached the end of their own resources. All of this pressure had been passed on as far as possible to the producers of sheep and cattle. A condition of almost absolute helplessness existed in the minds of stock-growers everywhere. The majority were clearly unable to pay their debts at prevailing values. No real values existed on stock on the range, as no money was available to carry on trading. Apparently unable to prevent the results of what was often a lifetime's endeavor from being wiped out in one sweep, the grower naturally developed a feeling of sullen resentment or of complete surrender. No sooner, however, had it become evident that the War Finance Corporation would extend loans on *some* valuation than a different feeling began to manifest itself.

The operations of the War Finance Corporation undoubtedly made it possible for many banks and livestock loan companies to avoid failure. Even under existing conditions, scores of banks in the range states did fail, and doubtless without the assistance of the War Finance Corporation the failures would have been on such a scale as to threaten a panic in the most seriously affected states. Even where insolvency was only postponed, valuable assistance was rendered toward preventing a more general breakdown of the credit structure in the West. In many instances livestock loan companies, which by the help of the War Finance Corporation

were kept out of the hands of receivers, were in time able to take up all rediscounts from the banks which had purchased their paper. This was of benefit to the banks all over the United States which had been carrying livestock paper, and which perhaps were in absolute need of funds, making it necessary to convert their rediscounts into cash. In addition, it was of considerable support to a great many local banking institutions whose affiliated loan companies were about to overwhelm them with requirements for assistance.

Some semblance of values on the range for both sheep and cattle was thus established. It seems apparent that values did rise considerably soon after the operations of the War Finance Corporation began. At least, sufficient credit became available to make trading possible on some established basis of values. It gave the individual producer an opportunity to extend his loan, to choose a more favorable season later to market his stock, and to improve the condition of the herd or flock and thereby increase its value.

The ultimate effects of this emergency credit differed somewhat in the two branches of the industry. In the case of sheep hundreds of producers were permitted to maintain their flocks and ultimately to pay all their debts and again put their operations on a profitable basis. This was due to the general recovery in the sheep industry, which will be discussed in some detail in the next chapter. As for

cattle, on the other hand, general conditions did not show a parallel recovery and indeed continued in a depressed condition till at least the fall of 1925.

In a rather negative sense, benefit was derived from the emergency credit furnished by the War Finance Corporation in that it afforded a respite from the forced liquidation before prices became utterly demoralized. Such additional wholesale liquidation as would apparently have been forced had there been no special agencies for the extension of livestock credit at this time would probably have entailed losses too large to be absorbed by the individual producer or even the local banks and loan companies. As it was, some losses to the War Finance Corporation from these operations were unavoidable. It is probable, however, that in the final liquidation of its affairs such losses will be small [6] and amply justified by the service rendered in checking a financial stampede in the livestock country.

Whatever criticism may properly be leveled against this or other emergency livestock credit agencies grows out of the very fact that they were emergency institutions and that in such crises it is impossible either to judge accurately the policies of production and sale which will be required by the trend of future events, or to effect such readjustments on the part of a large number of individual

[6] All of this presumably will be on cattle and probably incurred largely as a result of lending operations in New Mexico and Arizona.

producers, even where the real nature of the need is correctly understood. The real problem before us, therefore, concerns the permanent adjustment of livestock production in this country to the conditions of demand, in so far as they can be foretold, and the development of such permanent credit institutions as can most effectively furnish year in and year out the sort of credit that the course of the industry demands and can justify. This problem of permanent organization will be attacked in the remaining chapters of the book.

CHAPTER VI

ATTEMPTED READJUSTMENT IN THE CATTLE INDUSTRY

We turn now to the last phase of our historical analysis and, in this chapter and the next, review the steps by which some measure of recovery has been effected in the cattle and sheep business. No definite date can be set as marking absolutely the passing of emergency conditions. On the whole, however, the process of reconstruction began early in 1922. In fact, the years 1922, 1923, 1924, and part of 1925 can well be described as representing an effort on the part of producers of livestock to create more favorable circumstances under which to operate, and in the meantime to adjust themselves as well as possible to existing conditions. It was a period characterized by the same general psychology as exists after a huge conflagration in which those affected undertake to re-establish themselves and to function as normally as possible under the circumstances forced upon them. In this chapter we shall discuss the slow process of recuperation among cattlemen as they attempted to adjust their industry to the situation which they

will have to face from now on. The following chapter will examine the corresponding, though somewhat more cheerful, phase of the sheep problem.

There had been a lull in marketing in 1921. The number of cattle received at all the markets that year was 19,787,000, representing a reduction of 2,410,000 head. This decline was due, first, to the fact that by July the average price paid to producers was approximately down to the pre-war level, and every resource was strained to wait for the confidently expected reaction; and second, to the fact that the relief later extended to banks and loan companies by the War Finance Corporation made it possible for this prevalent desire to hold stock to be realized in many cases. That this was the case is indicated by the fact that the larger part of the decrease in marketing occurred during the last half of the year. This was after the operation of the Stock Growers' Finance Corporation began, and after it became evident that the War Finance Corporation was planning to extend some relief. In Chicago, for example, there was a decrease in receipts of 313,000 cattle during 1921 compared to 1920, and 257,000 of this reduction occurred in the latter half of the year.

Much of the reasoning back of the desire to withhold stock from the markets was sentimental and hysterical rather than strictly rational. It was freely argued that prices were so low that they must

react quickly. Few producers, it was evident, had ever considered seriously their costs of production in a businesslike manner, yet they knew that if they sold at prevailing prices they were "broke." Thus the natural law of self-preservation made them struggle to avoid such a calamity.

The decrease in marketings in 1921 only served to release a still larger stream of cattle during the two succeeding years. In 1922, 23,218,000 head of cattle were marketed, and in 1923, 23,211,000. Stocker and feeder shipments from the markets increased in these years to 4,864,000 and 4,553,000, respectively, over a million head above 1921. Furthermore, it was evident that only bargain prices would tempt the feeders, as any increase in price promptly discouraged buying.

During this period there was an abnormally heavy movement of calves to market. From June, 1906, to June, 1919, an average of 2,303,236 head per year had been slaughtered.[1] In comparison, the slaughter of calves from June, 1919, to June, 1923, was as follows:

1919-20	4,227,558
1920-21	3,896,207
1921-22	3,924,255
1922-23	4,337,780

In 1921, 340,681,000 pounds of veal were produced, and in 1924 this increased to 455,233,000 pounds. On account of these abnormal marketing

[1] That is, Federally inspected slaughter.

figures it soon became the consensus of opinion among livestock producers that herds were being rapidly depleted. This theory was supported further by the noticeable liquidation of cows.

During 1922 and 1923 the situation became so demoralized that a large number of cow herds were forced into the public markets.[2] A great many solvent producers began to lose hope and many others found it impossible to continue margining their operations. Thus, in order to stop further cash outlays, their herds were marketed regardless of the price. In normal times cow herds are disposed of as units, entirely on the range. They are properly considered plant investment, and it is on the range that they function. A cow considered on the basis of her breeding possibilities naturally has a value considerably in excess of her value from a slaughter standpoint. Even at best, a cow represents a low-priced beef product when slaughtered, and in 1922-23 the majority of these herds were below normal condition, as a shortage of cash had prevented almost all operators from taking the usual care of their cattle. Since no market existed at home on the range, if liquidation was necessary there was no other choice except to send the herds to the public markets to be sold as "canners and cutters." When high freight rates and other mar-

[2] The action of the War Finance Corporation in establishing a loaning value on cows on the range acted as a temporary sedative on market prices, but did not establish a normal healthy trade in breeding stock.

keting expenses were deducted, the actual net receipts often ran from absolutely nothing to perhaps $10 per head. Cows from the Texas ranches of the Matador Land and Cattle Company, for example, sold at the following prices a head from 1919 to 1922, inclusive.[3]

1919	$61.99
1920	33.69
1921	17.53
1922	12.96

Low prices and high costs squeezed producers, and especially those who were not entirely or almost clear of indebtedness. Naturally under such circumstances, especially where the indebtedness was large, it was clear that the operator could continue only as long as someone could be persuaded to finance the operation, either believing that outside collateral, such as ranch property and so on, was sufficient to protect the indebtedness or, like the producers themselves, *hoping* that by some providential act the price would suddenly be so lifted as to restore the margin that once existed and thus prevent losses all around.

There can be no doubt in the mind of anyone who has analyzed the situation that the costs entering into the production of cattle increased very rapidly in the 10 years preceding the period under discussion. The low inventory values at which a great many operators carried their herds, while at the

[3] Clay, John, *My Life on the Range*, Appendix.

same time market prices were steadily advancing, made it easy for the majority to neglect to examine their operations in a businesslike manner.

A careful analysis made by the writer covering only the absolutely essential elements entering into the cost of producing a calf shows an average cost in 1921-22 ranging from $26.22 to $28.80 (see Appendix C), which he believes is the theoretical minimum under which it was possible to operate in this period. These figures are approximately $1.00 to $3.50 less per calf than the Bureau of Animal Industry found, in a study of conditions in Northeastern Texas, to be only the actual monetary expenditure per animal, covering leases, interest paid on indebtedness, and actual operating expenses. These are approximately $11 to $15 per calf below the actual cost of production in 1921 and 1922, as estimated by the Bureau of Animal Industry, where *all* the cost elements were included.[4]

The average herd of calves in 1921 and 1922, including heifers and steers, undoubtedly did not sell above $20 to $22.50 per head. Therefore, under the lowest theoretical minimum expenses possible, as noted above, calves were losing approximately $5 to $7 per head per year. Under the actual con-

[4] These investigations extended over the years 1920, 1921, and 1922. In arriving at the cost of production per calf, all elements were included, such as operating expenses, interest on cattle and land investment based on current prices, interest on equipment and bank balances, and in addition a small sum allowed for the operators' labor. The actual cost on this basis was found to be $54.10 in 1920, $41.11 in 1921, and $40.31 in 1922.

ditions existing, as shown by a study of Northeastern Texas, they were losing from $7.50 to $10.00 per head, based on the actual outlay of expenses. On the total investment involved they were losing there from $17.50 to $20.00 per head.[5]

Prices improved but little during 1922, 1923, and 1924. Instead, a rather regular price, approximately the pre-war level, was maintained. This is revealed by the figures contained in the following table.

PRICES PAID TO PRODUCERS FOR BEEF CATTLE *

(Dollars per hundredweight)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1922 [a]	4.75	5.07	5.46	5.53	5.70	5.84	5.76	5.51	5.44	5.48	5.29	5.28
1923	5.51	5.55	5.62	5.78	5.77	5.82	5.72	5.60	5.70	5.48	5.23	5.26
1924	5.38	5.47	5.63	5.82	5.94	5.79	5.65	5.67	5.53	5.52	5.43	5.35

* *Yearbook*, U. S. Department of Agriculture, 1924, p. 853.

[a] The weighted average for the four years August, 1910, to July, 1914, was $5.24 per hundredweight.

The cattle raiser could not rapidly reduce his volume of production. It is difficult for the producer of beef cattle to curtail production quickly in unprofitable periods. A manufacturer by completely shutting down his plant can greatly reduce his outlays for raw material and labor. The cattle

[5] Another study was made of the cost of production on ranches in Colorado, New Mexico, and Oklahoma. It developed in that study that the cost of producing a calf on 55 ranches under observation averaged an actual cash outlay of $27.98. The actual selling price of the calf on the ranch was $21.50 for the average, making an actual cash loss of $6.48 per calf. The mountain ranches considered in this particular study produced a calf selling for $25.50, but the additional items of expense increased the loss here to $6.68 per calf. (See *The Producer*, July, 1924.)

grower has a large part of his fixed investment in the cow herd; and this animate property requires daily food and maintenance. Practically no expense can be cut off without actually disposing of the herd and breaking up the business of a going concern. The data with reference to the number of beef cattle for the years from 1920 to 1925 show that a little less than a 13 per cent reduction was accomplished in the five-year period.[6]

The rancher who handled only steers and the cattle feeder were in a more favorable position than the cattle producer. The "steer operator" on the range, for example, was forced by the decline in prices to dispose of the stock on hand in the fall of 1920 at a heavy loss. Unless he was ruined financially, however, he was able immediately to repurchase steers of a younger age at a price reduction corresponding to the price he received for his own product recently sold. This did not mean that he was enabled to recoup his former losses, as the prices received from the ultimate sale of his successive purchases quite often showed even further losses, or at least, no gain of any great consequence. However, since the product he was handling was one capable of a turnover every few months, and each turnover represented a new transaction, he was in a position that afforded an opportunity at least to

[6] U. S. Department of Agriculture, Bureau of Animal Industry, Circular No. 241, *Food Animals and Meat Consumption in the United States*, June, 1925, pp. 2-3.

recover part of his losses. If it seemed advisable it was also possible to cease operations altogether, after any particular group of cattle on hand was sold. In other words, his problem was more that of a merchant whose stocks of goods were turning regularly and whose unfavorable inventory prices were offset by succeeding purchases.

The Corn Belt feeder of cattle was in practically the same position. We have previously noted that the heaviest losses which were incurred fell on these men in 1921. Feeders made excellent profits in 1922, however, owing to the fact that corn was very cheap and the spread between fat cattle prices and stocker prices was relatively wide. In the fall of 1922 stocker prices advanced about one dollar per hundredweight. Fat cattle prices in 1923 did not advance proportionately, and this combined with increased corn prices reduced the feeding profits of 1923 to a very modest amount. Beef cattle prices fluctuated considerably in 1924, but maintained almost the identical average of the preceding year. A still further advance in corn eliminated any profit to the average feeder, while some suffered actual losses. However, on the whole, from 1922 to 1925 Corn Belt feeders obtained just about market prices for the feed consumed in their cattle-feeding operations, whereas the producers of range cattle were faring much worse.

The liquidation of millions of dollars of slow loans retarded the actual reconstruction of the cattle

industry. Questions of price, profit, and cost of production, were overshadowed by the efforts of loan companies, banks, and investors to collect the debts of the cattlemen. While a few far-sighted loan companies and banks began in the fall of 1920 to retire loans and shape their affairs in preparation for expected trouble, the real drive for liquidation did not begin until 1921. Then lenders found that they could secure payment only from the stronger class of patrons. To others, whose borrowings were so out of proportion to their resources as to preclude settlement except at a loss, many companies felt themselves forced to grant extensions. Failure to realize the duration of the depression period which the cattle industry had entered resulted in something of an adverse selection of the obligations that they still continued to carry, and tended to accentuate the alarm felt when the real situation was realized. Then lenders started immediately in a wholesale scramble for additional collateral. Managers and agents of loan companies and banks rushed hither and thither over the range country, securing deeds of trust and second mortgages on ranches and property of any sort, taking mortgages on any additional livestock that existed (including horses) and on equipment, in an effort to secure enough added margins to take care of the deficits which were clearly in store for them. After the herds had been disposed of, the additional collateral was also sold at the first opportunity. There was

such a flood of land mortgage foreclosures that the market for ranch land became absolutely demoralized. The lifetime savings of many a rancher melted away, and even then, in very many cases, the proceeds derived from the sale of every available asset were not sufficient to pay the debts.

A certain relatively small proportion of producers soon surrendered in the face of apparently hopeless conditions. On the whole, this class of men consisted of those who had gone into the cattle industry during the war period, clearly in an endeavor to make a small fortune "over night." They were generally those who had bought their holdings on the narrowest margins possible. Examples have been given by various loan companies where such borrowers came into the office of the loan company when it became evident that their own margins were exhausted, and openly asserted that they and the loan company were in partnership. Clearly no such intention had ever been manifested, and as long as there were profits existing no mention had been made of such a possibility. Once the proposition became a losing one, however, then they were ready to divide the loss with the loan company. The loss in fact was usually distributed "fifty-fifty," and even in more disproportionate amounts as a matter of necessity between the borrower and the loan company. The idea on the part of the borrower was to escape any judgments of

record, and by keeping his legal record clear, to be able to start again without the handicap of having to pay former debts, or of escaping them through bankruptcy.

In the winter of 1921-22 requests were constantly made of practically every loan company for money to buy cottonseed-cake, and to cover other necessary ranch expenses. Occasionally, where such requests were denied, either through necessity or policy, the borrowers wired the loan company that they were quitting, and that it could come and take care of its cattle. Such emergencies were always acted upon immediately; no second invitation was awaited.

The largest total losses naturally fell upon those engaged in the industry rather than upon the financial organizations serving it. No attempt has ever been made even to estimate the amount of the losses to individuals. Many assertions have been made, however, that as many as 75 per cent of cattlemen on the ranges were either already closed out or were by a strict analysis clearly insolvent. The stories of the tragedies of individual cowmen are legion.

It is no exaggeration to say that literally hundreds of producers who had been in the cattle business for 25 years or more failed in every state. Many of this class of cattlemen were men ranging from 50 to 65 years of age, who had spent practically all the best years of their lives building up an equity

in a home on the range, and in developing an outstanding herd of cattle. Practically all of these men knew no other business, and a great many were beyond the age when it is possible to make a new start with any degree of hopefulness. In addition, there were many young men, whose early life had been spent on the range, and whose experience was entirely in the cattle industry, who had placed all their savings in a herd of cows or steers when they returned from the army in 1919, replacing herds which they had sold when they entered the army at prices far below what they had to pay to re-establish themselves. Many of these men found themselves wiped out at a single stroke.

At the start of 1925 there was unmistakable evidence that the problem of profitable cattle production still remained unsolved. The average farm price of all cattle other than milk cows then stood at $24.29 per head.[7] This figure was almost as low as that of January 1, 1922, which immediately followed the trough of the deflation. With this slight exception it was the lowest since 1912 and compared with a peak price of $44.22 in 1919.

[7] Liquidation of herds had continued on a large scale during 1924. The total receipts at all public stockyards for 1924 was 23,695,000 head compared with 23,211,000 in 1923. Moreover, stocker and feeder shipments dropped to 3,978,000 head in 1924; a decrease of 575,000 compared with the previous year and the smallest since 1916, except 1921, which was only slightly below this figure. This naturally had a very depressing effect on prices and threw a larger quota into consumptive channels as is indicated by an increase in slaughtering of 820,000 head in 1924 as compared to 1923.

AVERAGE FARM VALUE OF CATTLE OTHER THAN MILK COWS *

Year	Price per head on January 1	Year	Price per head on January 1
1912	$21.20	1919	$44.22
1913	26.36	1920	43.21
1914	31.13	1921	31.36
1915	33.38	1922	23.79
1916	33.53	1923	25.57
1917	35.88	1924	25.06
1918	40.88	1925	24.29

* U. S. Department of Agriculture, *Yearbook*, 1923, p. 879; 1924, p. 837.

Cattle at the start of 1925 were in a disadvantageous position not only as compared with the general view of prices for all commodities, but also as compared with the majority of other agricultural products. This is shown in the following table.

INDEX NUMBERS OF PRICES OF ALL COMMODITIES, OF AGRICULTURAL COMMODITIES, AND OF CATTLE, 1920-1924 *

(1913 = 100)

Year	All Commodities	Farm Products	Corn-Fed Steers at Chicago
1920	226	218	170
1921	147	124	103
1922	149	133	111
1923	154	141	117
1924	150	143	114
Decline (1920 to 1924)	*28%*	*26%*	*35%*

* U. S. Bureau of Labor Statistics, *Wholesale Prices*, 1924, p. 40.

Under these conditions it is only to be expected that producers and everyone interested in the future of livestock would be carefully scrutinizing the in-

dustry to ascertain what was wrong and what remedies could be found.[8]

The cattleman by 1925 had reached the stage where he derived little comfort from optimistic speeches and articles on the part of farm papers, bankers, and farm politicians. Since 1922 someone had been continually "sounding a note of optimism." Too many times the producer and feeder had listened to these premature prophecies. The turn for the better was always "just around the corner." Why? Because it could not possibly be delayed any longer. The idea back of this attempt at cheerfulness was that any general gloom hanging over an industry is a bad thing. It is true that extreme pessimism may tend to paralyze any effort toward improvement. However, the mere existence of discouragement does not prevent recovery nor does an ostrich-like faith and hopefulness put the cattle business on a sound basis so long as many fundamental conditions governing it are wrong.

The actual facts during the first half of 1925 offered little encouragement for producers or feeders of cattle. For the first 20 weeks of the year the average prices of fat cattle in Chicago barely

[8] Many cattlemen in the United States were under the delusion apparently that their situation was a peculiar one and that conditions which existed here did not obtain in other cattle producing countries on the same scale. Reports from all the major producing countries, however, indicate that they were laboring under practically the same circumstances as producers in the United States. This was particularly true of Argentina and other parts of South America.

equaled those of the preceding year, as is evidenced by the table on this page. Since corn prices were high compared with the preceding year, a large percentage of the feeding operations during this time resulted in net losses.

PRICES OF FAT CATTLE, CHICAGO, 1925 AND 1924*

Week Ended	1925	1924
Jan. 3	$ 9.25	$ 9.50
10	9.20	9.50
17	9.10	9.60
24	8.85	9.25
31	9.35	9.25
Feb. 7	9.25	9.25
14	9.05	9.30
21	9.40	9.45
28	9.70	9.25
Mar. 7	10.10	9.60
14	10.35	9.40
21	10.05	9.65
28	10.35	9.55
Apr. 4	10.45	9.75
11	10.25	10.05
18	10.40	10.30
25	9.90	9.90
May 2	10.00	9.65
9	10.10	9.80
16	10.05	9.65

*"Native beef cattle" prices per hundredweight. Compiled by *Chicago Daily Drovers' Journal.*

On account of the poor condition of the herds during the breeding season in 1924[9] the calf crop over the whole country was particularly light in

[9] This was largely due to the drought during most of the last half of 1924 over a large portion of the Southwest, which was especially severe in south and west Texas, New Mexico, and Arizona. It reached such serious proportions that in the spring of 1925 a vast number of steer herds and even some cow herds were moved northward into Oklahoma and Kansas to be summer pastured.

1925. These conditions, following as they did the serious price depressions of the preceding four years, found a great many producers unable to hold their herds any longer. Cows were freely offered during the spring at distinctly distressed prices. Steers were maintained at about the same price level as of the preceding year but on account of their unusually poor condition of flesh, the average weight in the spring was a great deal below normal, thereby making the actual pound price to the buyer very high.

By the end of the year several changes of an encouraging nature to both producers and feeders had occurred. Undoubtedly the chief betterment occurred on the range in the fall due to a combination of favorable weather conditions with unusually good prices for range stock at the season of the year when the heaviest marketings occur. Favorable fat cattle prices were not equally distributed to feeders in the Corn Belt on account of the relatively small proportion of cattle marketed in the fall of the year, compared with other seasons.

From mid-summer on, an unusual amount of moisture over practically all of the Western range country produced the most excellent pastures that had existed for many years. Assisted by these natural conditions there developed a strong demand on the range for steers to restock ranges depleted either by droughts or liquidation during the preceding years. The price of veal calves remained at a

very favorable level all during the year, the estimated farm price received by producers averaging, for the year, $8.85 per hundredweight compared with an average of $8.12 per hundredweight the preceding year. On account of the favorable price and shortage of feed during the early part of the season, an exceptionally large proportion of range calves were shipped to market and slaughtered. This, together with the original shortage in the calf crop, developed a distinct scarcity in the number of calves suitable for feeders, and the fall price accordingly advanced fully $1 per hundredweight or $5 per head compared to the preceding year.

The effect of this restocking movement was sufficient to decrease materially the number of steers at the central markets suitable for stockers and feeders. Such cattle sold at very favorable prices, particularly those of lighter weight. The trend of these prices at all the markets compared with the preceding year and also 1923 is indicated by the average monthly price of stockers and feeders at Chicago.

AVERAGE STOCKER AND FEEDER CATTLE PRICES, MONTHLY, AT CHICAGO*

(Dollars per hundredweight)

Year	August	September	October	November	December
1925	6.65	6.60	7.00	6.90	7.30
1924	5.95	6.10	6.20	5.75	5.55
1923	6.10	6.45	6.00	5.95	6.00

*Compiled by *Chicago Daily Drovers' Journal.*

Under the stimulus of favorable calf prices, ample feed, and a more generally recognized condition of depletion in breeding herds, there gradually developed increased trading activity during the fall in range breeding cattle. This movement gathered momentum until, by the turn of the year, in the opinion of such recognized authorities as James E. Poole, of Chicago, ex-governor Robert D. Carey of Cheyenne, Wyoming, and John McKenzie of the Matador Land and Cattle Company, the price had easily doubled when compared to that existing on January 1, 1925. This meant that good range cows were selling at from $50 to $60 a head for spring delivery on the range.

The number of cattle marketed during 1925, however, provided no encouragement for those expecting a shortage to develop. A total of 24,660,000 cattle and calves arrived at all the markets during 1925. This was by far the biggest year's receipts since 1915 with the exception of the war years 1918 and 1919, and was an increase of 371,000 over the preceding year. The receipts included 6,950,000 calves, an increase of 427,000 compared to 1924, which was itself a record year. There was a further decrease in stocker and feeder shipments, compared with 1924, of 198,000 head, the total of 3,780,000 which went to the country from the markets being the smallest number since 1916 with the exception of 1921. It was natural under these conditions that a larger volume of slaughterings would be necessary.

The total number of cattle and calves slaughtered during 1925 totaled 14,462,000, and not only was this an increase of 612,000 over the preceding year, but it was the largest number slaughtered since 1916, with the exception of 1918, which, however, exceeded 1925 by only 412,000.

There were several factors responsible for the large volume of marketing during 1925. In the first place, there was the situation with reference to calf marketings which has already been noted. Second, those cattle which were moved from the drought areas northward into Kansas and the adjoining states either had to be sold on the market or shipped back at considerable expense to the range. Naturally, a large proportion were sold on the market and replaced with cattle purchased nearer home. Third, the very unfavorable market condition during the latter part of 1924 prompted a great many to hold off the market cattle which would normally have been sold to liquidate indebtedness, or which, on account of their age, should have been sold. Fourth, exceptionally good pasture conditions in the Northwest made it possible to liquidate aged steers in better than normal condition. Finally, high priced corn in the Corn Belt prompted the majority of feeders in that section to market closely cattle on hand.

Under the strain of such heavy receipts, it would naturally be expected that fat cattle prices would weaken correspondingly. Starting in June, however,

prices of average native beef cattle on the Chicago market advanced rapidly, and maintained until the end of the year a relatively high level compared with 1924. To a considerable extent relative prices at all the markets were indicated by the trend in Chicago for the last part of the year, in accordance with the table which follows.

PRICES OF NATIVE BEEF CATTLE, CHICAGO*

Week Ended	1925	1924
June 6	$10.40	$ 9.45
13	10.45	9.75
20	10.50	9.40
27	11.25	8.75
July 4	11.75	9.30
11	11.80	9.15
18	12.00	9.00
25	12.25	9.65
Aug. 1	12.40	10.05
8	12.50	9.90
15	12.40	9.70
22	11.75	9.75
29	11.80	9.20
Sept. 5	11.35	10.00
12	11.50	9.80
19	11.75	9.50
26	11.65	9.65
Oct. 3	12.10	10.10
10	11.55	10.20
17	11.35	10.35
24	11.15	10.40
31	10.70	10.30
Nov. 7	10.45	10.00
14	10.20	9.60
21	10.05	9.55
28	10.00	10.00
Dec. 5	9.95	9.75
12	9.65	9.00
19	9.60	8.70
26	9.60	9.45

*Compiled by *Chicago Daily Drovers' Journal*. 1924 prices in each instance are for the corresponding week of the year.

Sentiment in the cattle industry tended to exaggerate the extent of real improvement at the start of 1926. To be sure there was some cause for cheer in the figures of cattle population. The 1925 Census of Agriculture reported a total number of cattle of all kinds on farms as of January 1, 1925, of 61,571,752.[10] The estimated number of cattle of all kinds on farms January 1, 1926, was reported by the Department of Agriculture as 59,829,000. This is contrasted with 68,871,000 cattle on farms January 1, 1920; but one should not forget that the three-year pre-war average was barely 57 million head.[11] This decrease in numbers, however, taken with the very low levels of price persisting from the slump of 1924, together with the need for restocking, created a markedly speculative situation. Calf prices rose fully $5 per head, and the regular demand for steers, coupled with the necessity on the part of a great many operators to buy for restocking purposes, produced a considerable advance in steer prices. Speculators, noting all this, entered in a spirited way into the bidding, and herds were frequently traded back and forth several times between the purely speculative operators before being sold to a grazier or feeder.

[10] U. S. Census Bureau, *Preliminary Announcement, 1925 Farm Census.* The original estimate of the number of cattle on farms, at that time, as made by the Department of Agriculture, was 64,928,000. Following the publication of the Census figures the Department revised its estimate as of that date to 62,150,000.

[11] U. S. Department of Agriculture, *Yearbook,* 1925, pp. 1033-34.

While the rebound of prices from the excessive slump of the fall of 1924 and winter of 1925 was enough to make a neat profit on speculative turns, it was no reliable indication that satisfactory conditions had arrived. The total financial benefit to the industry as a whole, was considerably less than was currently supposed. The events were more important as tokens of the general direction in which the industry was moving, than as a measure of increased values themselves.

The Department of Agriculture estimate of January 1, 1926, showed an increase of approximately 11 per cent in the value of cattle other than milk cows compared with January 1, 1924. It was estimated that 37,539,000 cattle, other than milk cows had a value of $1,018,633,000, an average of $27.14 per head. Very few people, however, had been enabled to realize on their stock at this increased valuation. The figures were really only an estimated book value as of that date, based upon such transactions as had immediately preceded. This valuation, furthermore, was itself low compared with a value of $31.36 a head on January 1, 1921, and $44.22 a head during the boom year of 1919, and a pre-war valuation on January 1, 1914, of $31.13 a head.

Finally, it may be suggested that the rising spirits of the cattlemen contained an element of danger. They threatened a relapse into the easy-going conditions of the past rather than a stern and thorough

recasting of the economic organization of the industry. The easy optimism of certain speakers and writers [12] was very welcome to many in the industry. Such utterances by outsiders with inadequate knowledge of the fundamentals of the industry and by over-zealous enthusiasts within the industry itself retard rather than promote real prosperity. They strengthen the natural tendency to assume that, once prices turn a little upward, the necessity for conservative action or careful scrutiny of production costs has passed. As a matter of fact, the real constructive needs of the cattle industry have not yet been faced in any thorough-going way. We shall, therefore, consider in detail these more sober aspects of the present situation and the future outlook in Chapter VIII.

[12] For instance the sentiment of Dr. David Friday in an address before the American Association of Joint Stock Land Banks in September, 1925: "So there are six years of prosperity ahead for the cattle country. I venture to predict that with improvements in quality and good management in marketing it will be the most prosperous six years the industry has ever enjoyed."

Also an editorial in the *Denver Daily Record Stockman*, January 22, 1926, which declared: "Prosperity for the stockman isn't coming any longer—it is here."

CHAPTER VII

THE PROGRESS OF RECOVERY IN THE SHEEP INDUSTRY

We noted in Chapter IV that the sheep industry broke down after the war in a manner similar to the cattle industry. It is our purpose now to inquire how sheep have fared since 1921.

At the start of 1922 the sheep industry faced low prices. There was, in addition, an enormous volume of debts which had been contracted on flocks purchased at seemingly ridiculous prices. In fact, a mass of indebtedness remained where all the collateral had been sold in an unsuccessful attempt to liquidate obligations. In a manner decidedly in contrast to the cattle situation, however, sheep soon lifted themselves out of the depression into prosperity. Prices improved rapidly in 1922, and continued on a high plane throughout 1923 and beyond. Old debts were erased with few disasters. Growers and feeders who had seemingly been eliminated by the fall in prices began operations again, although perhaps more conservatively.

The prompt manner in which the sheep industry responded after first aid relief was administered to

it by the War Finance Corporation is well illustrated by a concrete example. The table on this page represents the prices of sheep and wool as received in 1921, 1922 and 1923 by the Swan Land and Cattle Company, Ltd., an English-Scotch Corporation operating in northwestern United States.

PRICES OF SHEEP AND WOOL*

Year	Bucks	Ewes	Lambs	Wool
	Per Head	Per Head	Per Head	Per Pound
1921	$2.77	$2.30	$3.05	$.184
1922	4.31	5.08	6.07	.366
1923	7.55	5.91	6.06	.477

* Clay, John, *My Life on the Range,* Appendix.

Prices paid the producers of sheep and lambs over the entire United States during 1922 and 1923 were high. The farm price of sheep, for example, leaped from $4.57 per hundredweight in January, 1922, to $6.51 per hundredweight in March, 1922. This price was approximately maintained during the balance of that year and the next, the exact average for that period of 22 months being $6.37 per hundredweight. Lambs advanced in price from $7.33 in January, 1922, to $10.21 in March. After a sag in the summer of that year, quotations again advanced to about the March level. The average farm price paid the producers of lambs from March, 1922 to December, 1923, was $10.29 per hundredweight. The 1924 prices followed rather closely those of

1923 with slight gains in the majority of instances where any change was recorded.

The major factor accounting for this swift recovery was a world-wide decline in sheep production. Since the price break of 1920 there had been a marked decrease in production of sheep in the United States. The average total of sheep from 1914 to 1920, inclusive, was 47,487,000 head. In 1922 this had declined to 36,327,000; in 1923 it was 37,223,000; in 1924 it was 38,300,000; and the 1925 estimated total was 39,134,000 head. World production showed an even more decided fall. A pre-war census indicated the existence of 624,326,000 sheep. The 1923 estimate was 552,517,000 and the 1924 estimate 535,940,000 head,[1] which is approximately 90 million head below the pre-war figure.

Mutton and lamb are neither imported nor exported; hence prices depend entirely on the domestic market. They are consumed almost entirely as fresh meat and are eaten chiefly in the cities of the middle Atlantic and New England states. Up to a certain point mutton and lamb may be considered "luxury meat." In other words, there is a certain rather fixed demand for these products among the wealthier classes in the urban populations. A de-

[1] *The Producer,* June, 1924, p. 11. *The Yearbook* of the Department of Agriculture, 1923, p. 1036, shows a pre-war sheep population of 589,000,000 head and a "recent" figure of 500,000,000 head. The "recent" year in the various countries from which figures were gathered ranged from 1919 to 1923.

crease in supply and an increase in price, therefore, does not exert a proportionate check on demand. When production reaches such a volume that there is a pronounced surplus over and above the "luxury" demand, prices of mutton and lamb are likely to fall rather rapidly. This is explained by the inelasticity of demand and the practical inability to put the product in a non-perishable form through methods of canning and preserving which are available in the case of beef and, more particularly, pork.

The process of liquidation which had brought annual marketings up to a figure of 27.3 million head in 1919 and 24.2 million head in 1921 now being checked, annual marketings dropped to 22.4 million head and 22.0 million head in 1922 and 1923, respectively, thus enabling prices to recover to a considerable extent. A secondary effect of this price recovery was to be seen in the increased volume of stocker and feeder purchases which in turn reacted favorably on prices on the range. Shipments of stocker and feeder sheep and lambs from the public markets in 1922 increased over the 1921 figures by 1,072,000 head, and by 1,383,000 head in 1923. Better prospects in the industry led to the rehabilitation of flocks, and this further strengthened prices. Most of the ewe lambs of the crop of 1920 and 1921 had been slaughtered. Ordinarily ewe lambs, representing about 15 to 20 per cent of each year's lamb crop, are kept back to replace old and dry ewes marketed or lost by death. The

practical cessation of this practice through necessity for two years created later just that much larger demand for ewe lambs to restore flocks to normal.

The return of confidence in producing circles and among bankers added considerable stimulus to prices. Production became profitable, and with this condition came confidence in the future. Trading on the range developed in excess of normal. Old loans were paid, or at least the process of repayment was begun. Bankers did not hesitate to make reasonable sheep loans. Producers were encouraged to rehabilitate their flocks. Thus, to natural economic forces, tending to drive prices upward, was added the force of a sympathetic credit policy.

The feeding of lambs has also been profitable since 1922. This is indicated in the table of prices

TOP COLORADO LAMB PRICES IN CHICAGO*

(The average price is 75 cents to $1.00 per hundredweight less than top)

Month	1921	1922	1923	1924
January	$11.25	$13.50	$15.25	$13.75
February	11.00	16.25	15.40	16.00
March	11.00	16.10	15.50	16.80
April	11.25	16.50	15.25	17.10
May	12.75	16.65	17.00	17.40

* Adapted from *Chicago Daily Drovers' Journal Yearbook,* 1925, p. 65.

on this page. Of course the absolute price does not alone determine profits. Corn, however, in Nebraska, Colorado, and Iowa sold around 25 to 30

cents a bushel in the early winter of 1921-22. This low price was largely instrumental in making lambs sufficiently profitable that year to repay most of the enormous losses of the previous season. While there was a general advance of probably 30 cents a bushel in the price of corn over the country in the next 24 months, yet it continued relatively low in price through the winter feeding season of 1923-24. There was also an excellent margin between the prices paid for feeder lambs and prices received for fat lambs during the whole period of three years.[2]

A favorable market for wool also has helped the sheep grower. High wool prices have been due to a combination of several conditions, some of which are doubtless temporary, but others of which appear to be relatively permanent. First among these we should notice a decline of world wool production from a pre-war average (1909-13) of 3,162 million pounds to 2,892 million pounds in 1925.[3] At the same time, there has been developing an increased demand for wool in many parts of the world, especially the Far East. This demand has been partly a matter of preference, but more because of the rela-

[2] The 1922 feeding crop was purchased on the range the fall before at an approximate average price of $10 per hundredweight less than the top Chicago prices attained in the winter season of 1922. In the winter of 1923 and 1924 the rough average spread between the prices received and the prices paid was between $5 and $7 per hundredweight. Out of these margins, freight and railroad handling charges absorbed from $1.50 to $2.00 per hundredweight from the range point through the feed lot to Chicago.

[3] U. S. *Commerce Reports,* March 15, 1926.

tive scarcity and high prices of cotton as a result of the ravages of the boll-weevil. In the United States wool prices have been materially affected by the general business situation. Employment conditions and general prosperity or a lack of prosperity influence the consumption of wool. In 1922 the apparent consumption of wool in this country increased to 636,355,000 pounds, a gain of 47,659,000 pounds over the previous year. The 1923 consumption was approximately the same.

In the face of these general conditions the position of the domestic wool producer has been further strengthened by the advance of tariff rates on wool. Without attempting to argue the merits of the wool tariff,[3] our analysis would go to show that the recovery of the sheep industry was much accelerated by this protection to the price of wool in the domestic market.[4]

Under these influences the price of unwashed wool

[3] See Smith, Mark A., *The Tariff on Wool* (Investigations in International Commercial Policies, Institute of Economics, Washington), 1926, pp. 142, 159, 232.

[4] There is also a tariff on mutton and lamb entering this country. Its effect has been, practically, to keep out all New Zealand and Argentine mutton and lamb. This being a frozen product, it has never been popular and competes, therefore, with the lower priced part of the product of this country, tending to produce competition and an unfavorable reaction on other parts of the domestic mutton and lamb market. The fact that such a large percentage of lamb and mutton is consumed on or adjacent to the Atlantic coast, and that such a large percentage of the supply is produced in the extreme western part of the country, would place the producers in the United States at a disadvantage if the tariff were removed, inasmuch as they are confronted with high-cost land transportation as contrasted with low-cost water movement.

to the producers increased approximately 275 per cent from August, 1921, to June, 1923. The index numbers, based on the 1910-14 average as 100, showing the course of this rise are as follows:

INDEX NUMBERS OF PRICES PAID TO PRODUCERS FOR WOOL*
(Average of 1910-14 = 100)

Date	Index	Date	Index
August 1921	87	October 1922	188
September "	90	November "	193
October "	92	December "	204
November "	91	January 1923	191
December "	98	February "	191
January 1922	97	March "	199
February "	121	April "	218
March "	134	May "	234
April "	138	June "	237 (High)
May "	163	July "	219
June "	187	August "	208
July "	186	September "	214
August "	178	October "	216
September "	183	November "	212
		December "	209

* Warren and Pearson, *The Agricultural Situation*, p. 178.

At the beginning of 1925 lamb prices were fully double the pre-war average; sheep were approximately 60 per cent higher than this average; and wool was at the highest point since the break of 1920, with an average farm price on January 15 of 42.8 cents a pound. Lamb prices continued until March on a level approximately as high as that reached during the war. Then they broke badly, causing feeders who market a considerable number of the lambs at that season of the year to lose the profits that they had made earlier in the winter.

There was marked improvement in prices, however, in the fall. With extraordinary forage conditions both on the ranges and in the forest reserves, the 1925 lamb crop was sent to market in far better flesh than usual, enabling the producer to sell a large percentage of his output as fat lambs. This meant that only a small number of lightweight lambs were left to meet the "feeder" demand which, coupled with a general bullishness on the part of lamb feeders everywhere, resulted in abnormally high prices. The confidence of feeders had manifested itself even as early as February and March, when contracts for unborn lambs were made at prices as high as war quotations. In many cases the Corn Belt feeder paid from $15 to $16 per hundredweight delivered at his station.

This strong price situation carried nearly to the end of 1925, but by January, 1926, prices for fat lambs weakened considerably, and in February and March broke badly. The inability of lamb feeders to lift the market out of this depression is important, since it tends to confirm the belief of a great many observers that the general upward movement of prices, which had extended since 1922, has now passed its crest. If this is the correct view, then the question arises whether the industry has now entered the downward phase of its production cycle.

Past experiences show that up and down swings of about four to five years each are characteristic of sheep prices. These have been discussed and

charted by Armour's Livestock Bureau.[5] The industry has been characterized by sudden and drastic leaps into prosperity and by pyrotechnic falls into the depths of low prices. As a general rule the entire sheep cycle is completed in from eight to nine years. The industry moves from a low to a high point over a period extending from four to five years, and about the same length of time from the high to the low point. From 1883 to 1922 these movements have held relatively uniform.

Since the low point of 1922, sheep production in the United States has been steadily expanding. Figures for the 11 Far Western states during the last five years illustrate the tendency toward increased production over the entire country.

1922	20,789,000
1923	21,400,000
1924	21,916,000
1925	22,347,000
1926 (estimated)....	23,412,000

Between 1925 and 1926, 79 per cent of the total increase in sheep took place in these 11 states, which produce something over half the entire sheep in the country. There was an enormous demand all during 1925 both for ewe lambs and old ewes, and this was true both on the ranges in the West and on small farms in the Corn Belt. It is likely that a large part of the increase in numbers in the future

[5] *Monthly Letter to Animal Husbandmen,* March and October, 1925.

will be through the growth of farm flocks.[6] Even in the Western range states the number of farm flocks of less than 100 head, have become far more frequent in recent years. Almost every state in the Union, with the possible exception of some of the Southeastern states, has considerable areas that can be utilized for sheep production. Under the urge of high prices much more attention will be turned to that branch of the industry, and the yearly production will increase more than proportionately since the lamb crop of farm flocks regularly exceeds the percentage for range flocks.

Many cattlemen, discouraged by the fact that cattle remained so long in the doldrums, have been tempted to turn to sheep production. This of course has been more true in those sections of the country where sheep and cattle are produced side by side in the same areas. Mr. L. O. Challman, vice-president of the Wyoming Stockmen's Loan Company, in a personal letter under date of January 28, 1926, states that this desire on the part of numerous cattle outfits has been a constant problem in the Northwest. Both there and in the sheep area of southwest Texas there has been a considerable shift from cattle to sheep.

In spite of the tendency to expand production, conditions are such as to check rapid increase. In

[6] This tendency is denoted, partly, by the fact that the percentage of natives to total arrivals at the markets increased from 29 per cent of the total in 1923 to 36 per cent in 1924, and to 43 per cent in 1925.

the past—in days of cheap production—a great expansion in the industry took place on the Western ranges. As with cattle, however, sheep have been pushed constantly further into the arid and rough or mountainous areas by the dry farmer and agriculturist. For a time it was true that sheep possessed an advantage over cattle in this struggle against the settler, since they were always herded and could follow the streams and areas of the best feed. Later, however, when large areas of the range states were patented and split up into relatively small holdings, cattle began to crowd out sheep. Thus the boundaries of the regions particularly adapted to range sheep production are rather clearly defined and incapable of any great amount of expansion, other than through increase in the percentage of the annual range lamb crop and through the growth of farm flocks in the adjacent agricultural regions. Increase in total production after it has reached a certain point is made with difficulty. Prior to the stimulus given sheep production by abnormally high prices, the tendency all over the world was toward decreased production.

Sheep and cattle production are highly competitive. The future of sheep raising depends on how its advantages and disadvantages, as compared with cattle raising, develop during the coming years. It is important both for the financier who expects to loan money to the industry, and for the individual

who expects to do the actual producing, that they be carefully considered.

Sheep have several advantages as compared with cattle. First and foremost among these advantages is the fact that they serve a dual purpose through the production of both wool and meat. As someone has remarked, "you cannot shear a cow," and the wool revenue from a flock, as we have previously noted, is counted on to meet the actual cash outlay necessary to cover yearly operating expenses, leaving the revenue from the lambs as interest and profit. Second, sheep have a quicker turnover than cattle. From a comparison of the cycles we see that there are approximately two complete sheep cycles to a single complete cattle cycle. A lamb is produced and marketed in a period hardly longer than it takes for a calf to be born. Third, sheep are adaptable to a wider range of natural conditions than cattle. They suffer less from droughts, and will thrive on weeds and forage in districts so arid as to be absolutely unfitted for cattle. Furthermore, from the standpoint of the Middle Western farmer, sheep are weed and brush scavengers and tend to keep a farm clean of these undesirable plants. Fourth, the lamb is produced as a finished product. A large percentage go to the packers from their mothers without additional feed, whereas range calves must be put on a grain ration before they are ready for slaughter.

Sheep also possess certain disadvantages compared with cattle. In the first place, success with sheep

demands a high degree of attention and skill on the part of the operator handling them. They are extremely subject to contagious diseases and parasites. Sheep, largely on account of lambing troubles and the attacks of predatory animals, require intimate detailed attention. Second, special equipment is necessary in the Corn Belt and Eastern states since the soil and climate there are naturally unsuited to sheep raising and feeding. Third, the nature of the marketing of sheep makes feeding in large numbers by strong operators much to be preferred. A feeder with only one car may be so unfortunate as to strike a break in the market of a dollar per hundredweight, as often happens; thus perhaps the profits of the entire transaction are wiped out. A feeder with ten cars, however, markets them gradually, and thus the high and low markets are averaged in the complete operation.[7]

[7] A brief survey of lamb feeding in the northern part of Colorado was made recently by the writer. The operations of one of the oldest and largest operators, who also handles cattle, revealed the following comparisons over the past 10 years of operations:

	Cattle	*Lambs*
Number fed	6,500	300,000
Number years profitable	5	8
Number years losing	5	2
Average net profit per head	$2.02	$1.13

The net profit was over and above labor costs, interest, and all feed costs. It did not figure any value for the manure. *On the whole the sheep operations, based on the relative investments involved, were about five times as profitable as those of cattle.* As this operator pointed out, however, there were some years when all the lambs sold early in the season lost money, while those sold later made large profits, and *vice versa*. There-

The violent extremes of the price level create the possibility of heavy losses and make the handling of sheep unwise by operators without sound financial backing.

The technical position of sheep in this country on the whole is relatively good. Many astute observers feel that the sheep business will not be built to a point in advance of actual needs for many years to come, if ever. This should not be confused with the up and down movements of prices. These will follow expansion and contraction in production compared to the low of 1920, and yet not destroy the relatively favorable position of the industry. Its future will be assured, particularly if producers succeed in expanding the consumption of mutton and lamb in the United States to an amount more nearly comparable to that found in other countries. At the present time our per capita consumption is only about five pounds. In France and Canada, it is almost double that amount, whereas the British consumption ranges from 25 to 27 pounds per capita. Our rather weak demand for lamb and mutton is particularly significant in view of the fact that our annual wool consumption is almost double our domestic production.

It has been our aim in Part I to picture the rapidly shifting panorama of the livestock industry and

fore, the results for a feeder of a small number over the same period of time might be unfavorable instead of favorable.

to trace the growth of its distinctive finance agencies. Always in the vanguard of Western civilization, the livestock industry has shared the character of the surroundings amid which it flourished. Production was highly individualistic. Operators had the daring of the explorer and the speculative instincts of the gambler, but were little inclined to adopt the exacting methods demanded for modern technical and business efficiency. Neither were they conspicuous in the development of group organizations concerned with effecting the stabilization and sounder economic adjustment of the industry as a whole to its rapidly changing situation.

We noted that, with the growth and expansion of the business, a special type of financial institution evolved to meet its peculiar needs. Unfortunately these livestock credit agencies often emulated the speculative proclivities of the producers themselves. Instead of exerting their full influence as a balance-wheel on the industry, they inclined to extend credit too freely in prosperous times and, either through fear or actual shortage of funds, to restrict credit unduly in times of difficulty. The credit system had not perfected its methods nor achieved economic stability any more than had the cattle and sheep men.

All this produced a situation peculiarly susceptible to the strains and dangers of a great war period. Producers were stimulated by high prices to an expansion in output and a disregard of costs made

possible and even encouraged by the blind liberality and careless operating methods of the larger livestock loan agencies. The industry became so highly dependent on borrowed capital at the peak of unprecedented prices that its collapse was inevitable when the end of the post-war boom dropped these prices suddenly to less than half their former level. In this crisis certain emergency credit agencies of extraordinary powers were set up to supplement more permanent agencies in tiding over a period of distress. They were, however, by no means capable of curing, nor were they perhaps supposed to cure, the fundamental causes of that distress.

In the last two chapters of Part I we have examined the process by which these first aid measures and the slow curative processes of nature began to effect some readjustment and reorganization in the cattle and sheep industries. The real problem, however, remains; namely, the perfecting of as permanent and efficient a type of business organization as is possible, and of adapting to it credit agencies designed and operated with peculiar reference to the needs of the business, capable of serving to the maximum its legitimate requirements, but so far as possible incapable of being abused or of contributing to the excesses and subsequent embarrassments of the industry in times of special strain. This problem we shall examine in Part II.

PART II

THE TASK OF REORGANIZATION

CHAPTER VIII

REORGANIZATION OF THE CATTLE AND SHEEP INDUSTRIES

The business of producing and marketing cattle and sheep cannot be soundly and efficiently organized unless it has an adequate and economical system of financing. At the same time, livestock credit agencies cannot develop maximum service at minimum cost unless the industry has an economic organization which is sound, technically efficient, and intelligently adjusted to existing—and changing—economic conditions. As a preliminary to our consideration of possible improvements in livestock credit institutions (offered in Chapters X-XII) therefore, we shall address ourselves in this chapter to a discussion of some present defects in the economic organization of cattle and sheep production and the prospects of placing the industry on a sounder and more permanent footing.

Many cattlemen have apparently indulged a hope that prosperity could be promptly legislated into the business. Considerable pressure has been put upon legislative and administrative agencies in the hope that some panacea would be forthcoming.

The Sixty-eighth Congress entertained many such proposals, and the President's Agricultural Commission in January, 1925, gave the livestock problem a prominent place in its program. Several measures of indirect relief have, in fact, been passed, such as tariffs on cattle, meats, and wool, and enactments enlarging as well as liberalizing the credit agencies through which farmers as a whole are served. But while improvements in the methods of financing and marketing and aids to more economical production can be effected through legislation, it is being relentlessly impressed upon producers that the health and prosperity of their business depends to a much larger extent upon the courage and skill with which they attack the problem of more efficient organization and management. The most promising efforts toward better adjustment to existing and prospective conditions lie in three general directions: (1) better internal management; (2) adjustment of supplies to consumer demands; and (3) the improvement of marketing.

I. BETTER INTERNAL MANAGEMENT

We have already alluded (see pp. 24, 33) to certain factors of costs, such as rising land prices, wages, and freight rates, which are largely outside the producer's control. There are, however, several phases of production technique in which there is ample opportunity for fruitful labor in paring down costs. The nomadic frontier type of ranching characteris-

tic of the nineteenth century was a passing economic situation suited only to a half-settled country. The transition to stable cattle production in conjunction with diversified agricultural development, fringing off into a certain amount of definitely established ranch and range conditions, calls for the scrutiny of all details of farm and ranch economics in the light of the knowledge now available concerning both the science and the business of agriculture.

The intrusion of agriculture into the range country presents the possibility for more adequate feed production. Ranchmen in general have been all too slow to turn their backs upon the traditions of the past when subsistence for their flocks and herds had merely to be accepted as a free gift of nature. In order to avoid the loss of stock through starvation during hard winters or the delay of their maturity or the lowering of their quality because of insufficient feed supplies, it is necessary that the tillable areas scattered through the ranch country be much more fully utilized. This can be done not alone by the harvesting of wild and tame hays and alfalfa, but also by the raising of numerous "row crops," such as Indian corn, kafir corn, milo maize, feterita, hygeria, and others. At the very least, such feeds should be available for feeding what is known as the "hospital list," that is, the weaker animals which are gathered from the herds for special feeding near the main corrals or watering places. Furthermore, inexpensive pit or trench silos can be constructed on

every ranch and, with reasonable precaution, feed stored in them can be kept satisfactorily even into the second or third season after harvest.

More ample feed will solve the problem of the present extremely low calf crop. Authorities place the average for the entire range country today at approximately 60 per cent, or 60 calves for each 100 cows in the herd. The wastefulness of carrying 100 producing units to obtain an annual production of only 60 young animals can be largely done away by more judicious feeding and better herd management. This implies closer attention to the herd than has been customary on the part of many owners. Unfortunately the influence of easy prosperity during the war period caused a great many ranchers to move to some nearby town, and even today many of them still maintain their residence in town, making more or less frequent trips to the ranch. This practice is costly. The old English adage, "The eye of the master fattens the calf," must be put into more common practice.

The change in requirements of the beef trade makes necessary a general improvement in the quality of the stock. The opportunities in this direction are shown by the Committee on Improving Livestock Breeding of the Institute of American Meat Packers, which estimates that from 90 to 93 per cent of the cattle reaching the central markets grade only from fair to medium, that 2 to 5 per cent fall in the "common" class, and only 4 to 6 per

cent in the good to prime class. Thomas Cross, head buyer for Armour and Company, has stated that "the profit in beef production in the future will increasingly lie in quality stock." [1]

All this demands that the cattle rancher of the future be able to market younger animals of increased size. Ten years ago 75 per cent of the beef taken by the trade was what is now considered heavy beef, whereas today hardly more than 15 or 20 per cent of that class is taken. The popular carcass weight has decreased at least 200 pounds in a decade. To meet this changing demand, the ranchman must secure the most rapid growth possible from his young stock. In the latter part of the nineteenth century steers were not sold off the range until they were five or six years of age. Later the age of marketing dropped to four and five years. Since 1920 in most of the range country four-year-old steers are rarely found and three-year-olds are scarce.[2] Yearlings are becoming more and more the

[1] *Progressive Beef Cattle Raising* (published by Armour and Company, 1923), pp. 7 ff. Mr. Cross goes on to say that, on account of high production costs, early maturity and quick turnovers are certain to be essential requirements of future beef production. These in turn call for good breeding in the foundation stock. "Only cattle high in the blood of the purebreds are capable of reaching this degree of finish in their yearling form."

[2] As the system existed in the past, and does today in certain districts, a calf of about six months weighs probably on the average 350 pounds at weaning time in the fall. It is then turned on the range for the winter, and in the succeeding May will weigh little more than it did when weaned. The following October, as a yearling, it will probably weigh from 550 to 600 pounds. The next May the weight again is usually little more than it was the preceding fall. Under this system a steer is

typical product that is marketed. Indeed, several authorities insist that the tendency in the production of cattle will be to approach as nearly as practicable a "cow and calf" basis, similar to the "ewe and lamb" basis that has become standard in recent years in the sheep industry.

As for the sheep industry, sheep producers are on the whole successfully adapting their production methods to changing requirements. Under the older system, when wool production was the prime object, sheep were kept until they were three or four years of age on the average. The public gradually developed a distinct preference for lamb, however, and penalized mutton. The sheep industry has, by gradual stages, reached the place today where it is on what is called the "ewe and lamb" basis. It is

marketed that is over four years of age and weighs on the average in Kansas City from 1,100 to 1,200 pounds, providing no severe droughts are encountered. In the meantime there have accumulated large annual expenditures for feed, leases, interest, and the like, and a considerable death loss each year. Thus the production of a four-year-old steer is relatively uneconomical compared with a calf or yearling.

For example, one rancher told of an incident where a neighbor sold in the fall of 1924 one group of steers less than 18 months of age and one group that were coming five-year-olds. The younger steers sold for barely $20 per head less than the older ones. Late in January, 1925, the writer saw in the Kansas City yards one group of yearling steers from Kansas weighing approximately 1,000 pounds sell at the top of the market, $11.35 per hundredweight. At the same time there was a group of yearling steers from the Panhandle, equally well bred, that were almost exactly half as large as the former group and sold for $8 per hundredweight, which was the top of the stocker market at that time. The one group brought over $110 compared to approximately $40 for the others. The $70 difference was produced at a relatively small cost from a combination of grain with Kansas grass.

seldom that lambs are kept beyond the weaning stage, except for ewe lambs intended for replacement in the flock. This has accomplished for the sheep grower what is still necessary for the cattle producer, that is, a quicker turnover, eliminating considerable death loss and a disproportionate cost of production after the young animal is taken from its mother.

A great many things yet remain to be accomplished that will materially decrease the cost of wool and lamb production in the range country. One of these is a better system of range management that will produce better results from the forage. Another distinct need is for the raising of the percentage of lambs produced per flock. Lamb crops on the average are not quite as deficient as calf crops, but the relationship is just as bad when it is considered that a great many ewes produce two lambs. It is doubtful in the judgment of a great many authorities whether the average lamb crop is over 65 per cent. It is possible to develop ways of reducing the loss in flocks from predatory animals and from parasitic diseases.

The necessity for more economical operation will direct much attention toward the diversified farmer and small ranchman. Students of the livestock industry argue that in the future production will be carried on much more largely by the diversified farmer. This tendency has already been observed in certain sections of Canada. One writer on this

subject recently stated: "The cattle industry of western Canada means more to that area today than it ever did before, because now it is the main support of thousands of small farms instead of a few elaborate ranches. With a smaller farm and a smaller herd has necessarily come a superior animal, more economically and profitably raised." [3] In so far as this proves true in our country, we may expect to see competitive pressure brought to bear on the ranch producer operating on a relatively large scale to develop the same measure of economy and efficiency as the small rancher or diversified farmer. A few words may therefore be said as to the comparative advantages of the two types of operation and some of the probable effects on the industry caused by the rise of the smaller producer.

It is inherently easier for the small operator to adopt certain measures of economy. He is in a position to give his cattle more personal and minute attention. This attention to the herd results in a distinctly larger calf crop percentage. The cattleman with a few cows is very careful to make sure that all of them are bred. When the calving season arrives, he is in a position to watch the individual animal, give such attention as may be required and provide shelter if necessary. As a result, he has practically no loss among the new-born calves from storms, exposure, hunger, thirst, or predatory animals. The calf crops in the herds of these small

[3] *The Producer,* February, 1924.

operators approach very close to 100 per cent, as contrasted with the 50 to 65 per cent in the herds of the average range operator.

Likewise, it is relatively easier for the small producers to raise an animal of increased size at an early age. This is partly due to the fact that the practical details of raising row crops and kindred feeds are comparatively easy for a man caring for 100 cows as contrasted with an operator who must provide feed for several thousand. Livestock on farms utilize a great deal of feed that is a by-product of grains or other crop production, and employ the slack time of a working force whose size is determined by the "peak load" requirements of the major crop enterprise.

There is a rather general assumption that the reduction in the size of ranches means a corresponding decrease in cattle production. Nothing so impressed the popular imagination as the enormous ranches of the nineteenth century, and the vast herds grazing there have always seemed to imply large totals. On the other hand, there is nothing impressive to the average observer about a score or more of small units embracing the very area formerly covered by the one large outfit. Reactions of this nature are doubtless in part responsible for the rumors which constantly float around in livestock circles to the effect that the number of cattle in particular areas has declined sharply. It is true that in some districts the break-up of the range has resulted in a

reduction of cattle numbers. However, well-informed men in districts in Texas, where from one-fourth to more than half of the land had been put into cultivation, hold that there has not been any appreciable decline in the total cattle population of these particular districts; and such evidence as can be gleaned from official estimates of livestock population do not show that the advance of cultivation is a cause of decline in cattle production.

The purpose of the present section has been to show how the introduction of more diversified production and more intensive methods in the one-time range country offers the only method of maintaining necessary supplies, and to set forth reasons for believing that if producers avail themselves of the best methods thus far worked out, production costs can be brought below present levels. The prosperity of the industry calls for this, on the one hand, and, on the other, for the scaling of volume of output to the absorptive power of the market. The double objective is to supply the market as fully as possible while yet making a profitable level of returns to the industry as a whole.

II. ADJUSTING SUPPLIES TO DEMAND

A previous chapter has pointed out (p. 162) that one of the chief factors in the recent improvement in the cattle industry was the decline in numbers. This is simply another way of saying that overproduction had been one of the chief difficulties in

the situation. Of course, "over-production" is a relative term used here to signify that there was more stock coming to market than consumers would take at a price profitable to the producer. Men in other lines of business seek to avoid such a situation or to cure it by careful adjustment of their productive operations to the condition of the market. The livestock industry needs to achieve a higher degree of efficiency in making such adjustments in the future.

Cattle production has long been characterized by strongly marked swings from over-production to under-production. Of course such cycles have been modified by extraordinary influences, such as droughts, severe winters, or war periods, and have been inextricably involved in the complexities of general business. However, the tendency for the business to swing from profitableness to unprofitableness in about seven or eight years and then back again in a similar period has been striking.[4]

The slowness of the development of these cycles from their respective high and low points has been due to the fact that it took approximately seven years after the cattlemen were encouraged by rising

[4] "From the low point in 1876 to the high point in 1885 it took nine years, but from the high point in 1885 to the low point in 1892 it took seven years. From the low point in 1892 to the high point in 1900 it took eight years . . . To the high point in 1915 it took seven years and again . . . to the low point in 1922 it has taken seven years." *Wallace's Farmer,* March 3, 1922. See also Warren and Pearson, *The Agricultural Situation,* p. 167, and Armour's *Monthly Letter to Animal Husbandmen,* Vol. 6, No. 6.

prices to expand their production to the point where it had a serious effect upon the market. It takes time to save from the annual crop a sufficient surplus of heifer calves and to raise and breed them so as actually to increase the producing power of the breeding herds of the country. The process of liquidation after production has reached a peak appears from statistics to take place about as slowly as does expansion.

A similar periodicity occurs in the sheep industry, although the ups and downs in the sheep business do not display the pronounced regularity existing in the swine and cattle industries. . . . Despite certain irregularities, the periodicity is quite distinct. Low points in sheep values have occurred in the years 1869, 1879, 1886, 1895, 1903, 1912, and 1922. The distances from trough to trough in the cycle vary from seven to ten years, and equal distances separate peak from peak. In other words, the sheep business, as far as values are concerned, improves over a period of four to five years and then retrogrades over a similar period of time. Since the depression of 1921 and 1922, the sheep business has shown a remarkable improvement so that sheep (including lamb) in 1924 were selling at 132 per cent of the pre-war average value. The fluctuations in market receipts [show that] relationship between receipts and values is inverse, as was also the case with hogs and cattle.[5]

The recent cycles of livestock prices have naturally been somewhat disturbed by the exceptional war and post-war conditions. The recovery of sheep prices was rapid, thanks to the tariff, but the move-

[5] "Cycles in the Sheep Industry," Armour's *Monthly Letter to Animal Husbandmen*, Vol. 6, No. 7.

ment appears now to have passed its crest. Most students of the matter agree that the down-swing in cattle prices beginning in the latter part of 1920 was probably ended by the slight recovery which began in the spring of 1925. The normal expectation would seem to be for improving conditions for some six or seven years longer, but any tendency to rush in and expand the business rapidly now might promptly bring back unprosperous conditions.[6] On the other hand, the more advanced leaders in the cattle industry are wondering whether it is not possible for this business to catch step with the march of modern business progress to the extent of improving its organization and operating methods to a point where greater stability can be secured. It is being suggested that a process of "directed pro-

[6] Even before the industry gets to the quarter-post on the track of balanced production, some authorities are urging it to turn back. They assert that over-production is a myth because we have fewer cattle than in 1919, the peak year, whereas at the same time population increases at a rather steady pace. Such persons are inclined to talk about beef cattle and to ignore an increase of almost one million milk cows since 1919, which are ultimately converted to beef uses. A large number of strictly dairy breed male calves are vealed and, sooner or later, every dairy animal finds its way into the consumptive channels of the beef trade.

It is in fact impossible to separate the two classes—beef and dairy cattle. The census form used by the Department of Agriculture provides two spaces for cattle—"beef cattle on this farm" and "dairy cattle on this farm (cattle kept mainly for milk production)." A great many of the census gatherers, to ascertain the number of dairy cattle, asked, "How many cows do you milk?" Thus it is evident that a large percentage of just plain "red cows" get into the dairy class that are in reality semi-beef cows, and are adding a larger percentage of beef animals to the cattle population each year than are the strictly beef herds as they exist on the range.

duction" might mitigate the severity of cyclical swings and stabilize the industry on the basis of moderate but more uniform prosperity.

"Directed production" is being achieved in other industries and should be vigorously striven for in livestock production. One farm paper [7] has pointed out that this idea, somewhat earlier developed in industry, "is getting to be respectable" as applied to agriculture. President Coolidge's Agricultural Commission, composed as it was of conservative men, recommended that co-operative organizations of producers be given the legal right to make and carry on "orderly production programs." While this recommendation was not literally carried out, Section 5 of the co-operative marketing act favored by the Administration does give such associations the right to collect, exchange, interpret, and disseminate information concerning their own operations and conditions bearing on the industry. Livestock producers are not at present either widely or strongly organized, and it remains to be seen what advantage, if any, will be taken of this provision. Some years ago the Corn Belt Meat Producers' Association had prepared for them a detailed and comprehensive plan for carrying out a scheme of stabilization, but little support could be found for it among the membership and it was dropped. It seems apparent that any close-knit effort in this direction must await the development of much

[7] *Wallace's Farmer,* February 27, 1925.

stronger co-operative organization among livestock producers. But, on the other hand, a considerable raising of the general level of intelligent judgment on the part of the rank and file could be secured through merely making available certain statistical information not now available.

It is obvious that a program of directed production in the livestock industry, and particularly in the case of cattle, must be planned on a relatively long-time basis. A partial reduction in beef supplies could be obtained for one specific year without eliminating entirely the productivity of the cow herself. This could be accomplished by selling as veal a considerable proportion of that particular year's calf crop. This would not affect the usual procedure of handling those cows devoted chiefly to the production of milk. About the only possible advantage of selling a large number of veal calves out of a range herd other than to reduce the calf supply would be the improvement in flesh and condition of the cows. This, in turn, would be reflected in more satisfactory prices for cows intended to be turned from breeders into beef. If a definite program of "directed production" were undertaken before production had greatly expanded, it should be possible to accomplish the end desired without upsetting the beef market at any particular time, providing the program were extended gradually over at least two years' time.

Any scheme of "directed production" must em-

brace a large proportion of the producers. Any attempt to check over-production runs up against the fact that maximum output seems a necessity to each individual producer. While it is well known that a reduced total volume returns as much or more income to producers as a group, curtailment naturally appears to the individual to be the wrong method of meeting his particular problem. It does not seem possible that increased taxes, heavier overhead, and higher living expenses can be more effectively met by reducing the number of calves produced annually. Hence, under the present system of competitive production, the individual exhausts his energies battling the waves of overproduction. Even if he realizes that overproduction exists and that a certain number of operators must be driven out of business before operations can be made profitable, still each man continues just as long as possible in an effort to save his own individual enterprise, hoping that enough of the others will drop out to restore prosperity. The culmination of such a struggle finds the efficiency of many of the survivors impaired and an enormous economic waste entailed in the process. To remedy the situation there must be a considerable degree of merging of independent producers in a group organization which will attain at least an advisory position [8] of great influence.

[8] There is some doubt still as to the status of large or close-knit organizations under the law. Restraint of trade statutes, however,

The flexibility of cattle production methods and the length of the production period make possible a relatively accurate adjustment to conditions of demand. We have already pointed out that, since cattle are not an annual crop, any program of "directed production" must cover a period of years, but once forces are set in operation to undertake such planning, there exists considerable flexibility in the adjustment of supplies from season to season and year to year. Calves may be vealed or saved for breeding purposes. Young stock may be crowded for early maturity or their progress toward the market stage retarded for a full year or even longer. Breeding operations may be curtailed or suspended in accordance with careful estimates of the number of breeding animals whose maintenance over an unproductive period will be justified. Sheep with their shorter productive cycle, present even better opportunities for stabilization. Such possibilities of adjustment, however, can be realized only if a rather comprehensive and efficient type of organization is developed to function for the industry as a whole, and only if adequate data as to actual operations are made available.

Statistical agencies of the government are rendering better service in this field each year. There are still, however, other important aspects of the prob-

seem to be construed with greater leniency today, and this particularly in the case of co-operative organizations in agriculture. Furthermore, several state and two Federal statutes specifically confer powers of the sort suggested above.

lem which are not adequately covered. Inasmuch as the adjustment of production and the financing of the producer are closely intermingled, we have deferred to a later chapter (p. 279) certain suggestions as to one way in which a greater degree of knowledge could be brought to bear in determining the scale of productive operations. A final aspect of the problem of adjusting supplies to demand touches the comparatively short-time distribution of stocks from day to day, week to week, or to some extent by months, and also the adjustment geographically among the different consuming sections. This, however, touches the question of the marketing machinery rather than production arrangements, and so belongs properly in the third division of our discussion of reorganization measures.

III. THE IMPROVEMENT OF MARKETING

Today the marketing of cattle depends largely upon guesswork. Thomas E. Wilson, former president of the Institute of American Meat Packers, made the statement in 1922 that "one of the most pernicious causes of unrest and dissatisfaction in the past has been the prevailing unsystematic method of marketing livestock. There has never been any permanent efficient system regulating the flow of livestock to the market centers." [9]

About 40 per cent of the year's total supply of

[9] An address before the Texas and Southwest Cattle Raisers' Association, Fort Worth, Texas, March 15, 1922.

cattle is marketed in less than three months. These are September, October, and November. In fact, the bulk of the cattle marketed during those months is shipped between September 10 and November 1. The reason for this is plain. It marks the end of the range season. Grass is good until about October 15. Most operators feel that the cattle must be marketed near that time or carried over the winter. Otherwise they will shrink so much in weight during November and December as to offset all or more than could be gained from an increase in price by marketing later. This situation could be somewhat mitigated by fuller development of feed resources and a more scientific study of costs and market returns. Probably such readjustments as were possible would not greatly affect "grass fat" cattle sold for immediate slaughter, but by concentrating effort on the feeder movement favorable results could be secured both directly through feeder prices and, later and indirectly, on the prices of corn-fed cattle.

Over one-third of the fall marketings find their way into the stocker and feeder trade. While this is an important outlet from the standpoint of the producer and range operator, the concentration of buying during a brief period creates a distinct tendency to flood the market 60 to 150 days later with cattle all in the same relative condition. Too many feeders have held to the idea that the time to buy cattle is in the fall, just after their corn crop is produced, and that they should make certain of

using up this feed before the next summer. Obviously, there must be concerted action between producers and feeders if this extreme seasonal movement is to be equalized.

There are also wide fluctuations in the daily receipts at the markets. At certain seasons of the year the Western markets receive the largest proportion of the week's supplies on the first and second days of the week, and the Monday run far surpasses that of any other single day.[10] This tendency for receipts to be concentrated on two or three days of the week exists also at the other markets. Instead of being distributed in a somewhat even manner from day to day and week to week, the runs jump up and down in a hectic fashion. An excess of supplies today is telegraphed and broadcasted over the country, and the succeeding day or two finds a drastic curtailment in marketing. Some advance naturally occurs coincidently with these short supplies, and upon the arrival of this news in the country there immediately occurs a deluge of loading, and again the market is demoralized.

Livestock receipts are not properly distributed between the various markets. A vast overloading of

[10] "Chicago, where cattle prices are determined for the whole country, is getting too many cattle early in the week, enabling killers to tuck their knees under a groaning bargain counter on Monday and Tuesday. Last week, for example, 76 per cent of the week's supply arrived on these days, creating acute congestion and depressing values to the lowest levels of the season, which was obviously unnecessary, as the sharp decline necessitated by the bargain sale was practically all restored by Friday." *Breeder's Gazette,* April 15, 1925, p. 465.

one market on some particular day often finds all the other markets with only a normal supply. Sometimes such a condition of excess receipts exists at one place while there is an actual deficiency in supplies at one or more of the other centers. The viciousness of this practice is largely due to the fact that an over-supply at a leading market tends to exercise a demoralizing effect over all the markets. This is particularly true when Chicago is over-stocked. A pamphlet recently issued by the Chicago Livestock Exchange makes the following statement:

> Chicago is the recognized basing point of the livestock industry. Here values are determined daily for the whole country. Trading centers of lesser magnitude await Chicago quotations each day before turning a wheel.

When Chicago is over-stocked, it is maintained that quotations at Omaha, Kansas City, and other markets must be lowered accordingly, inasmuch as the packing houses at those points cannot continue to sell their dressed products at materially higher prices because they must meet the competition of prices of Chicago. Thus a relatively small excess of stock in Chicago above actual needs depresses all the markets, while if that surplus were diverted to the remaining markets the decline, if any, would be less severe.

The problem of orderly marketing of cattle and sheep, though highly complicated, is not entirely unsolvable. Already the range cattlemen have

made some progress in spreading fall marketings more uniformly over the last six months of the year. This is indicated by the fact that since 1913 the height of the fall peak has been continually lowered, and the marketings have begun earlier in the season and lasted considerably later than was the custom prior to this time. In some sections hay is available in sufficient quantity and is sufficiently cheap to make it possible to feed fleshy cattle enough to hold their weight, or even to gain, without increasing the cost of the pound unit. In many districts the feed is too expensive to expect to maintain the fat on a fleshy animal, but here it is often practical to feed the younger and thinner animals and market them after the peak of the runs have passed. Wheat pastures are utilized for this purpose in Kansas, Oklahoma, Colorado, and the Panhandle of Texas.

A system put into effect during 1917 in Chicago has brought about distinct improvement in a more even distribution of receipts over five days of the week instead of two, but even this problem is far from solved.[11] Similar plans are now being contemplated at some of the other markets. The maximum results in improving the distribution of receipts from day to day and between markets have not been accomplished because the various groups involved do not fully co-operate. It is important

[11] See Wilcox, R. H., "Economic Conditions Causing the Two-Day Cattle Market at Chicago and the Effect of the Zoning Law," *Journal of Farm Economics,* October, 1921.

also that there be fuller and more accurate information as to supplies, demand, and actual market movement than have yet been made available by the government statistical service.

Producers and feeders have begun to seek the improvement of market conditions and prices through co-operative marketing. The cattleman is one of the most individualistic producers, his surroundings, the tradition of the industry, and the nature of the conditions under which he operates having always tended to discourage co-operative effort. The development of co-operative marketing during the last four or five years, however, has shown that cattlemen can co-operate, and that from these elementary efforts of co-operation a better system of control of production and marketing can be worked out.

One of the noteworthy developments of this movement has been the formation of co-operative livestock commission companies at the market centers. The National Livestock Producers' Commission companies started first in Chicago late in 1921. They increased to organizations in 13 markets. The Farmers' Union has companies at nine markets, and there are in addition several co-operative firms at different markets representing producers' organizations of that particular territory. Some of the effort of these companies has been wasted by their failure to co-operate with each other. Regardless of this, however, in many of the markets the business of some of these firms leads that of any other

firm by a good margin. In spite of the bitter fights waged against them by the "old line" commission companies, it appears that the co-operatives are here to stay.

These producer companies are not a "cure-all" for market abuses, as some are inclined to consider them. Their growth and usefulness will be in direct proportion to the efficiency of their operations. While savings in commissions to the individual are considerable when compared with the usual commission, yet the actual saving per car is small. Therefore, unless these companies can deliver service at least equal to that of the others, producers will not be tempted very long to use their services. One of the greatest benefits of having these companies in the markets is the jarring of the "old line" companies out of a lethargy produced by their one-time quasi-monopoly. Many people insist, and the *prima facie* evidence supports the contention, that there are too many livestock commission companies in almost every market; and one result of the operations of these co-operative companies will probably be to eliminate eventually the less efficient organizations in the face of keen competition now existing.[12]

[12] A somewhat different system of co-operative selling has been developed in Canada by the United Grain Growers, Limited, now known as the United Livestock Growers, Limited. The cattle are handled on a pool basis whereby the stock is first sorted and appraised; it then becomes the property of the pool at the appraised valuation and is either sold on the market, or may be reshipped to some other market if that course appears

Direct selling from ranch to feed lot has been developed as a means of lowering market costs and improving service. The expenses at the stockyards have seemed to the producers to be out of proportion to the net price which they receive for their cattle. To sell direct to the feeder [13] appeared to offer a way of eliminating commission charges, speculators' profits, yardage and feed charges; and for only a moderate additional freight charge cattle could be shipped on beyond the markets for several hundred miles.

Three plans have been developed for moving cat-

advantageous. After the stock has been appraised, it is the absolute property of the pool and the owner has no further interest in its disposition. The ordinary commission rates in force at the markets are assessed. At the end of the year the surplus over and above cost of operation is pro-rated back to the shippers in proportion to the patronage.

The advantages of this system are two-fold; one, that of being perfectly free to sort from all the cattle received on any one day, thereby making it possible to offer loads strictly uniform which bring a premium, both from packers and from feeders; another, the ability to stabilize market values. Inasmuch as the cattle are property of the pool, if that particular market is depressed, cattle can be held off entirely until a later date or moved on to another market, thereby leveling the supplies of all the markets. The success of this plan depends very materially upon the measure of expert valuation applied in addition to managerial ability.

[13] Feeders too were dissatisfied with buying at the markets. Since they were practically always forced to buy through a "yard speculator" the stock was usually artifically "filled" and in a stale condition which made it easy for diseases to get a start, causing, in many instances, heavy losses after the cattle reached the feeders' lots. The cattle, furthermore, were usually gathered out of several consignments resulting in each lot containing animals of several different types which affected adversely the final selling price. The feeder himself was at considerable expense in purchasing his stock on account of traveling expenses and additional commission, additional feed, and freight charges. The speculator's profit was also added to the price which the producer had received for his product.

tle from the range to Corn Belt feed lots. One system was put in effect by a large ranch in Texas, which sold its own product entirely by mail.[14] Under the second plan an organized group of producers in a district in southwestern Texas sold its entire annual output of calves through the medium of auction sales held in the fall at various points throughout the Corn Belt. The third plan was put into operation in 1920 and has been developed successfully by an organization in Des Moines, Iowa, whereby old established herds of high quality cattle were broken up into carload units and shipped direct to the feeders.[15]

Direct buying of stockers and feeders assists in solving the problem of handling the deluge of range cattle that are marketed between August and November. To the extent that this assists in a better distribution of daily and weekly supplies, the market is stabilized. No competition in bidding is eliminated, because now any feeder can purchase his supplies through some organization direct from the range, or, if he feels that this direct price is too high, he has the open market to fall back on. Thus

[14] The cattle were sold on a head basis at a considerable premium over the market price, on account of the fact that the particular brand was known to be better than the average cattle available on the markets.

[15] This firm furnishes cattle during all months of the year and from various sections of the United States. The prices are on a pound basis rather than a head basis, and are based on market quotations for stock of similar quality. The shipment is delivered at the feeder's station and is subject to his inspection before he pays for the cattle.

there is a constant, close relationship between market prices and range prices.

Methods of marketing feeder lambs should be improved. Periodic glutting of the feeder lamb market during the heavy marketing period carries down the price level for the fat and semi-fat lambs in the flock as well. The practice of contracting a considerable part of the lamb crop to speculators in advance of delivery date and even before the lambs are born has been promoted as a means of reducing the tendency for indiscriminate dumping by a large number of individuals. Such benefits, however, could be obtained for the producers by concentrating selling through a central co-operative agency. In fact, the Western range sheep producer has an excellent opportunity to co-operate in selling his products to advantage. There is a larger unanimity of purpose among them, more similarity of plans and methods, and a larger concentration of production as to area and individuals than in the majority of cases. We shall refer later to what has been accomplished by the co-operative wool pools.

Buying feeder lambs direct from the range has increased greatly in recent years. Large feeders located in northern Colorado and parts of Nebraska and Idaho purchase their lambs direct from the producers or from the range speculators. Organizations have been established in the Corn Belt to effect a direct movement from the range to Corn Belt feeders who use only small numbers of lambs. In a

few communities, where there is considerable concentration of lamb feeding in the Corn Belt, the total requirements have been grouped and the buying done by some one member direct from the producer.

There are many practical advantages to the feeder in buying lambs direct. When shipped direct from the range, they are federal-inspected at the loading point as to health, and are loaded in a clean disinfected car. Since they do not touch any of the regular stockyard markets en route, they have little opportunity to contract disease. This plan eliminates dipping, which is necessary if they move through the markets—a process which feeders assert delays lambs about 15 days in getting well started on feed. Furthermore, in purchasing direct, the feeder knows where the lambs were raised. The kind of feed and the general character of the country where the stock was produced vitally affect its feeding qualities. Any lamb of the right type produced in the high-altitude, mountainous areas of the Northwest makes an admirable feeder.

The marked concentration of feeding areas should greatly facilitate effective organization among lamb feeders. Not only is the feeding highly concentrated in particular territories, as contrasted with the wide spread of cattle feeding, but it is furthermore carried on by a relatively small number of individuals. At least there is a sufficient number of those feeders operating on a large scale to form the

nucleus of an excellent working organization. Apparently thus far most of these men have proceeded on the theory that they should endeavor to "jump the gun" and attempt to guess the other person's actions, and profit unduly thereby. The results of this in practice have been sufficiently disastrous on the whole to demonstrate the clear necessity for constructive work along this line.

The possibility of co-ordinated action of the sort indicated looks less remote now that some co-operation in selling has actually been effected. Co-operative selling agencies have been developed for sheep similar to those already discussed in connection with cattle and hogs. There are, in addition to the regular co-operative commission companies, special companies, particularly in Omaha and Chicago, which concentrate their efforts entirely on the co-operative selling of sheep.

Considerable progress also has been made in more efficient marketing of wool by establishing co-operative pools. Large groups of producers consign their wool to a central organization where it is stored in a warehouse in some favorable location and sold in large "graded lines" when the most opportune time seems to have arrived. The plan gives the producer more bargaining advantage, since a considerable percentage of the wool produced is marketed through a few large pools. Furthermore, the grower is enabled to borrow against the wool stored in the warehouse, and thus it is possible for him to con-

tinue his activities unhampered while the central organization is waiting to complete the sale.

The marketing problem embraces the selling of meat as well as live animals. Producers feel that both the cost of the present system and the methods followed tend to restrict consumption of meat. Recently the United States Department of Agriculture made a survey of meat retailing methods. It found that the number of patrons per meat shop ranged from 300 to 700, whereas 800 patrons was the *minimum* number that a shop should have in order to operate economically. The majority of cutters could serve twice the number of customers actually handled. The importance of uneconomical retailing can be appreciated when one realizes that 22 per cent of the value of a live animal is absorbed by retailers' profits and expenses.

It is a well-known fact also that a large percentage of retail meat shops take advantage of the average customer's ignorance of quality and value. While professing to sell high quality products, they actually carry only the medium or even inferior grades of beef or offer mutton or even goat in place of lamb. The consumer becomes aware of the deception when he attempts to eat his purchase, and after several such experiences is likely to be disgusted and to substitute bacon or other standard brands of pork products, where he is sure he will get a uniform quality product.

This situation would be materially improved and

the consumption of beef accordingly stimulated by the adoption of a uniform policy by the packers of stamping clearly a grade on each quarter of beef corresponding with the grade of the animal. This general idea was agitated vigorously during the year 1925 by the *Breeders' Gazette.* Consumers have indicated, by their interest, that they are thoroughly in accord with this idea.[16]

Finally, consumption of beef and lamb can be stimulated properly only by keeping its merits before the public in the same degree as those of competitive products. The maintenance of the present scale of living of the vast multitude of meat eaters and the reasonable development of potential consumption is all that is necessary to afford ample opportunity to effect a substantial increase in the

[16] The packers feel that the adoption of standard grades of beef carcasses would prejudice the movement of the lower grades. The writer suggests that at the outset a very simple adaptation of the theory be undertaken. For example, the simple division of carcasses in three classes might be suggested as follows: steers and all baby beef to be called "AA" products; heifers to be designated as "A" products; and cows to be designated as "B" products. Perhaps at the start as few as two divisions under each grade might be adopted, that is, AA1, AA2, A1, A2, B1, and B2. This would make it possible for a large class of consumers who really prefer a high quality piece of beef to obtain it with absolute assurance by paying the necessary premium in price. Those desiring the cheaper cuts below the grades standardized would of course, as now, be taking their chances upon the exact quality of the beef they purchased.

The mechanical feature whereby the carcasses would be properly marketed is a very simple matter, and could be accomplished at practically no expense. In addition to the differentiation between grades as suggested above, a further distinction as an aid in purchasing could be accomplished by the use of different colors for the "grade" mark.

total consumption. It is an absolute necessity that a vigorous advertising campaign on the part of the packers and retailers, with the co-operation of the producers, call attention to the merits of beef and lamb as parts of the regular diet, familiarize consumers with the various grades, and educate them in the palatable preparation of the cheaper cuts. Some excellent work along this line is being done at the present time by the National Livestock and Meat Production Board, founded in 1922,[17] and, on the Pacific Coast, by the Pacific International Livestock Exhibition of Portland.

The dependence of both the sheep and the cattle industries upon credit institutions has been demonstrated many times since the last quarter of the nineteenth century. We have seen them intoxicated with too generous credit; we have observed them throttled with too little credit. Much remains to be done in suiting the character of credit to the na-

[17] The Directors of this Board include representatives of eight livestock producers, livestock commission firms, packers, and retail butchers. Their efforts in 1925 covered a wide range of activities. Among the more important ones was the undertaking of a co-operative study in connection with 29 agricultural experiment stations and the Federal Bureau of Animal Industry to investigate the factors which determine quality and palatability of meat. Other important activities include the following: preparation and exhibition of educational meat exhibits ot the *International Livestock Exhibition;* distribution of 150,000 recipe books entitled "Meat and How I Cook It"; publishing and distributing literature of all the various kinds concerning meat.

The work of this Board is financed by the assessment at the larger markets of five cents per car upon the buyer of each car of livestock. The annual budget of $70,000 to carry on this work is entirely inadequate.

ture of the industry and in developing the correct administration. The remainder of the book will be devoted to the financial phases of the livestock industries. We shall consider the channels through which credit flows into the industry and the status of each at the present time. We shall analyze methods in current use and determine so far as possible whether they are adequate or inadequate. Finally, we shall consider the possibilities of co-ordination between production and the credit institutions serving the industry.

CHAPTER IX

PRESENT STATUS OF THE OLDER LIVESTOCK FINANCING AGENCIES

Before turning to a consideration of the future of livestock financing in the United States, a brief survey must be made of the present situation of those livestock financing institutions which have survived the chaotic post-war period. The three major types of financial institutions which existed before the crisis of 1920-21 are still in existence, namely, banks, cattle loan companies, and livestock commission companies. To these institutions has been added a new type of financial agency—the agricultural credit corporation created by the Agricultural Credits Act of 1923. This new institution will be reserved for separate treatment in Chapter X.

I. BANKING INSTITUTIONS

From the standpoint of the ranchman and farmer, local banking facilities have never been really adequate in much of the producing section and particularly in its remoter areas. The producer would like to find ample resources available at his nearest

trading point so that he could make his financial arrangements in a prompt, simple, and personal way whenever occasion arises. But because of the irregularity of its flow, the slowness of its turnover, and the large size often assumed by single transactions, this business is not of a character which can be handled entirely by the local banks of the sections where the bulk of our supplies of cattle and sheep are necessarily produced.

On the whole, country banking facilities in cattle and sheep regions are still inadequate. As one Kansas banker puts it, "You do not find cattle in a town like Topeka, but in some little town 50 miles away where the banking facilities are probably one or two banks of only $25,000 capital." This situation, as was noted in Chapter II, makes it impossible for these institutions to make loans of the size often required by the nature of the cattle business. On account of the undeveloped nature of most of the areas in which cattle are produced in the Western range states it is only to be expected that the cattlemen must look to outside sources for the major part of their credit requirements. In the cattle feeding states banking capital is much more adequate than in the range states, but is divided among an excessive number of small state banks. This limits the accommodation which can be rendered to any one individual and makes it necessary for large feeders to seek elsewhere for funds with which to carry on feeding operations.

Resources of country banks in the livestock territory are supplemented by their city correspondents. It has already been pointed out that a very large number of the country banks in the range country have always been affiliated with stockyard banks, while in the feeding states city banks are more generally utilized. The major part of the credit support given by these city and stockyard banks is extended through the medium of rediscounts handled for their country correspondents. The custom also persists, especially among the stockyard institutions, of handling loans of sufficient merit without the endorsement of the local institutions which negotiated the loans in the first instance. A small percentage of loans is made direct to individual operators through introductions from the country correspondent, but without in any way passing through the local bank.

Only a limited number of the smaller state banks in the western half of the United States have ever joined the Federal Reserve system. It is often argued that by doing so they could put themselves in a better position to serve the financial needs of the livestock industry.[1] However, these rural institutions have not felt that the advantages of direct

[1] The Federal Intermediate Credit Act of 1923 amended the Federal Reserve Act by reducing the capital requirements necessary for admission into the Federal Reserve system. About 4,200 banks become eligible as members through the passage of this amendment. Up to the present only seven of these 4,200 institutions have been added to the system.

participation in the Federal Reserve system were particularly greater than the benefits already enjoyed indirectly through connections established with correspondent banks which, in turn, were connected with the Reserve system.

The inadequacy of local banking facilities has been made much more acute as a result of the depression of the industry since 1920. While the conditions differ sharply in different parts of the cattle feeding and producing territory, some states were so hard hit in all lines by the price decline that practically all banks were for a time unable to provide such assistance to cattlemen. New Mexico and Arizona banks, generally speaking, were in a considerably more crippled condition than any of the other Southwestern cattle-producing states. Texas banks were benefited at all times by the profitableness of cotton. Kansas, a state in which a considerable number of banks have failed, was lifted out of this depression by the advance in wheat in 1923 and the excellent corn crop of 1924. The same holds true in Oklahoma. where apparently about 22 per cent of the banks in existence in 1922 either failed or went out of business. There was about the same percentage of failures in South Dakota, and the absolutely deplorable condition of North Dakota banks was well known everywhere. Other Northwestern states, including Colorado, Wyoming, Montana, Idaho, and Nebraska, have been greatly benefited by the advance of small grain prices, profits from

sugar beets, and the extraordinarily high prices of sheep.[2]

Probably the most widely noted differences in conditions between respective districts and individual localities occurred in Iowa and Missouri, with somewhat similar conditions in parts of Minnesota, Illinois, Nebraska, and South Dakota. Iowa and Missouri were the only Corn Belt states where any considerable amount of assistance from sources other than local banks has been needed to handle the requirements of cattlemen. In Iowa, up to about the middle of 1925, approximately 10 per cent of all the banks had failed.[3]

A survey made by the writer early in 1925 in about 100 representative communities in Iowa developed the following facts as to the situation: 48 per cent of the banks studied had rediscounted cattle paper during 1923 and 1924 with some outside agency, and 52 per cent had been able to handle the requirements of their customers without aid. The average amount of rediscounts of a bank in 1923

[2] The prosperity of the sheep industry during the last three years has made it possible for sheep producers and feeders to obtain practically all of their credit needs through banks. The writer's own experience in connection with the purchase of considerable quantities of feeding lambs in the Northwest during the last two years has revealed rather conclusively that the banks in this territory are on the whole in a position to take care of the needs of the majority of sheepmen.

[3] Garlock, Fred L., "Bank Failures in Iowa," *The Journal of Land and Public Utility Economics,* January, 1926, Vol. II, No. 1, p. 49. In addition to these failures a considerable number of institutions which were hard pressed were able to pay depositors in full by consolidating or through aid rendered by their directors.

was $31,460; in 1924, $32,215. In 1923 the average amount of strictly cattle loans made by all banks reporting was $53,040, while in 1924 this average amount had shrunk to approximately $39,000. Out of the 48 per cent of banks rediscounting with outside agencies, 33⅓ per cent used their correspondent banks for this purpose. Almost exactly the same percentage used the Federal Reserve Banks, and the remaining one-third utilized the facilities offered by livestock commission companies. Seventy-five per cent of the banks were drawing their cattle loans for six months, 15 per cent made their loans for periods averaging less than this length of time, and barely 10 per cent made their cattle loans for nine months. It is interesting to note that approximately 57 per cent of the banks surveyed were getting 8 per cent interest, 39 per cent were charging 7 per cent, and barely 4 per cent were assessing a 6 per cent rate.[4]

Sound livestock financing demands better bank management. The recent period of distress has em-

[4] The condition of banks varied widely within the same regions. For example, in one town in central Iowa in January, 1925, both existing banks failed. In another community less than 15 miles away, where the general economic situation was practically identical, the two existing banks were in an excellent condition. One of these banks had deposits of over $500,000, had no rediscounts whatever, and had a cash reserve of approximately one-third. The difference in the condition between the two communities was primarily one of bank management. Not infrequently banks in one community rediscounted or sold from 75 to 100 per cent of their total cattle loans, while in a nearby community the banks were in the market for additional loans over and above their own customers' requirements.

phasized again the fact that our extremely democratic system of free banking has produced many small and weak institutions, forced by competition into practices of doubtful safety and manned by persons of inadequate training. The zeal for expansion of their business in very many cases leads them to grant larger extensions of credit than are really wise or to make such loans without as careful a scrutiny as there should be of the purposes for which the money is to be used and the competence of the borrower to employ it profitably.

To be sure, it is very easy for city bankers to criticize what seem to them slipshod methods on the part of country banks, without realizing that close personal contact and acquaintance with both the individual borrowers and the business in which they are engaged often gives the really shrewd country banker a basis of judgment much more dependable than any formal method of rating applicants and scaling credit extension. Even admitting this, however, the recent disastrous experience among country banks shows plainly that more careful credit analysis is much to be desired. On the whole, very little use is made of financial statements as a means of arriving at a correct estimate of the borrower's general financial condition. Too often the banker relies merely upon general impressions, and fails even to ascertain the extent of his customer's borrowings elsewhere. While conditions were good, with prices of livestock rising, a great deal of rather

perfunctory handling of loans came to be the practice in many of the new banks that were springing up throughout the cattle producing states. The recent depression has served to show in a rather drastic way the weaknesses of such banks, and has resulted in the elimination of many of those which were most careless in their practices and in imparting a wholesome lesson to those which have survived. There still is opportunity for considerable improvement in the method by which this business as a whole is handled, and some possibilities of systematic improvement will be outlined in Chapter XI.

II. LIVESTOCK COMMISSION COMPANIES

The second traditional source of credit available under certain conditions for producers of livestock, particularly cattle,[5] is the livestock commission company. Some, though not all, terminal selling agencies make loans to some producers as an adjunct of their regular commission business. Companies which engage in this work may be divided into two classes—those that handle only occasional loans for certain large and well-established operators and those which regularly handle loans in sufficient number and volume to warrant the establishing of

[5] Only one livestock commission company makes loans on sheep on an extensive basis. This company lends not only to producers in the Northwest, particularly in Wyoming and Idaho, but also to feeders in Colorado and Nebraska and in the Corn Belt. Some sporadic financing of a similar nature is done by other companies in the yards at Omaha, Kansas City, and Chicago, but the total amount of it does not reach very large proportions.

a special division of the company for this purpose. Organizations of the second class are relatively few as compared with those of the first.

Livestock loans are made by terminal commission companies chiefly for the purpose of building up or maintaining their regular commission business. The companies limit themselves as far as possible to feeder loans, which have early maturities. A long-time loan is not attractive to the commission company as it derives its chief profit from the selling commission rather than from interest on the loan. A great many of these companies insist that the stock on which the loan is secured be purchased through their own organization, and of course they always require the finished product to be consigned to them for sale.

To an extent, the money loaned by livestock commission companies represents their own capital. However, in order to enlarge their business as much as possible they pass such loans on to stockyard banks with which they are affiliated, or to what may be called "downtown" banks as distinct from those located adjacent to the stockyard itself. In recent years some of the livestock loan divisions of large commission companies have established connections with country banks and become regular buyers of their cattle paper. The greater part of the money loaned through livestock commission companies is obtained in the Chicago, Kansas City, and Omaha markets.

The recent disastrous period in the livestock industry inflicted severe losses on commission companies which had been financing producers. Some of the largest and oldest companies were seriously embarrassed and had to curtail their operations sharply. Whether this will mean a tendency in the future for such companies to limit their activities more strictly to the commission business and leave the financing of the producers to other agencies remains to be seen. That would seem a natural reaction on the part of companies that have had their capital curtailed and their estimate of the hazards of the business increased through recent experiences. On the other hand, competition is keen and the extension of credit is a means of attracting the business from which their regular income is derived. A special element in the situation also is introduced by the coming of the co-operative commission companies, which are in a position to take advantage of the Intermediate Credit system to establish affiliated livestock finance associations. In order to meet this situation it may be that the private commission companies will exert more rather than less effort toward the maintenance or increase of their lending operations in the future.

At all events it seems certain that the methods of credit extension pursued by these companies will be tightened up in the future. In Chapter II we noted that when the livestock commission companies developed this business during the eighties and nine-

ties it was carried on in a very slipshod and unbusinesslike manner. These old methods have been largely superseded, and present practices tend to be put on practically the same basis as those used by the separately organized cattle loan companies. This is particularly true of commission firms that set up a special financing division which is to all intents and purposes a livestock loan company.

III. CATTLE LOAN COMPANIES

Cattle loan companies enjoyed a period of great prosperity and rapid growth during the war and the early post-war years. Many new companies, however, were established during this period with inadequate funds and inexperienced management. Most of these new companies and indeed many of the older ones were unable to weather the severe storm that broke in 1920. While no real statistics are available, it is estimated by a man intimately acquainted with the business that aggregate losses suffered by organizations loaning on cattle on the range probably reached 50 million dollars.[6] A single organization is said to have suffered losses aggregating $8,000,000, which represented approximately half its total loans. It is definitely known that one well-known cattle loan company suffered a total loss aggregating four times its capital and surplus. It is believed that this is not an unusual case. Some

[6] Clay, John, *My Life on the Range*, p. 358.

organizations failed publicly and left behind an enormous amount of unredeemed securities; [7] others were in fact insolvent but were saved from bankruptcy by the action of their stockholders in assuming responsibility for all outstanding paper.

In the main, three courses of action have been followed by the older companies which operated prior to and during the war period. Many have already liquidated their affairs or are now completing the process of permanent dissolution. A few, while retaining their corporate existence, remain inactive—merely marking time. Some organizations have resumed operations on an active basis. The companies which are marking time are cleaning up old deals, disposing of ranch property given them as added collateral, and supervising such loans as remain on their books. They have also been making some new loans, particularly during the past year, to old customers who were unfortunate enough to lose a part of their holdings during the slump but who, it is believed, will be able with proper banking support to recoup their losses and settle their obligations. As conditions in the industry generally improve these companies will doubtless resume active operations.

The number of livestock loan companies actively operating at the present time is not large. Reports

[7] One startling failure of this character occurred in Kansas City. The losses ran into the millions and involved hundreds of banks all over the country as well as private investors. Practically all of these losses were passed on to the investors in cattle paper.

indicate that St. Paul and Sioux City have no strictly cattle loan companies in operation at present. St. Louis, which formerly had three organizations, handling during the peak years from fifteen to twenty million dollars of loans annually, now has only one company, which loans less than a million dollars a year. Omaha at present has three major companies remaining out of five. The same general situation prevails in Albuquerque, Tucson, El Paso, Portland, Los Angeles, Spokane, Fort Worth, Kansas City, Denver, Oklahoma City, and Wichita.

There are several companies which specialize entirely in sheep loans but operate along lines similar to those of cattle loan companies. In addition, some of those companies devoting the major part of their activities to cattle financing handle a limited number of sheep loans.[8] Such companies, in the main, are utilized by larger operators whose requirements are beyond the capabilities, as well as the legal limits, of the local institutions. These various loan companies are at the present time actually the sec-

[8] A limited volume of loans is still carried by institutions that were started at the outset to operate with the War Finance Corporation. Practically all the original loans made by these companies have been paid, or at least have been reduced to a very low figure. Some new loans for emergency needs have been made by these companies, chiefly to old customers who started with these companies when they were first organized. Such portion of this paper as was acceptable was subsequently transferred to Federal Intermediate Credit Banks when the War Finance Corporation passed out of existence. It seems to be the intention of most of these companies formerly connected with the War Finance Corporation eventually to dissolve.

ond most important source of funds for sheepmen, banks being distinctly first in importance.

The loan companies are at present adhering to very conservative lending policies. Some companies making loans on cow herds insist that they will not loan over 50 per cent of their appraised value, with a majority perhaps willing to loan up to two-thirds or three-quarters of the estimated value of the herd. One company states that it will loan up to 80 per cent on cow herds, but only in case the borrower has ample outside financial strength with which to meet possible losses. In the case of steers the majority of companies are now willing to loan up to perhaps 80 per cent on range loans. This may be compared with the common practice in the earlier days of making loans up to 100 per cent. In the Corn Belt, loans are commonly made for feeding purposes up to 90 per cent of the cost price and in some cases up to 100 per cent, where the borrower is in a particularly strong position and possessed of ample feed to finish the stock for market. Formerly loans up to 100 per cent were nearly universal. On the whole, the tendency is for financial institutions to insist on wider margins in loans.

There has been some decrease in the size of individual loans extended to borrowers in proportion to the loan company's capital. It was not uncommon in pre-war days for a loan company to make advances to a single borrower equal to 100 per cent of its capital and surplus, and often loans were made

which were several times that amount. Any severe loss on a loan of this character naturally wiped out a large part of the loan company's capital. It was to these excessively large loans that some of the worst casualties among the loan companies after the war can be traced. The more careful practices of loan companies today show that they have learned caution from their disastrous experience.

"Split loans" are now studiously avoided by all loan companies. "Split loans," as we have pointed out previously, are those where two or more lenders have made advances to the same borrower on different groups of cattle or on different parts of the same herd. It was a custom generally followed in pre-war days that loans of this kind should not be made under any circumstances. During the war, however, competition for business became so keen that this rule was practically discarded. Some of the new companies paid but little attention to it, and almost without exception the old companies had some loans of this kind on their books. All manner of complications, trouble, and losses occurred from this source, and the experience seems to have taught most companies to avoid the practice.

Examination of loans today is thorough and rigid. Every detail is carefully checked by the inspectors of these companies which are actively in operation. On the range the cattle are tallied through a chute. The brands are checked; the age estimated; and the condition, quality, and value of

the herd are carefully noted. The county records are carefully searched and must show everything to be in accordance with the representations on the financial statement. The values set out on this statement are carefully scrutinized and confirmed. Loan companies have found in the past that a net worth can very easily be fabricated by even as little as a 10 per cent inflation of a large volume of assets. They insist on knowing something more about a borrower than the information they were accustomed to receive in former times. "We think you will find Mr. A. honest," pencilled across the bottom of a letter of inquiry was in the halcyon days often accepted as sufficient approval. Present usages are decidedly in contrast with the procedure as it developed between 1918 and 1920.

Ample sources of feed and water are insisted upon by the present loan companies. An organization operating in the Northwest summarizes this particular part of its procedure as follows: "The first thing on taking up a proposition is to find out how much feed the man has; how much spare money he has or can raise to buy feed in case of a hard winter." Some attention is given the matter of feed in the Southwest. There, however, the important factor to be guarded against is not so much that of hard winters as unexpected droughts. In certain sections the matter of winter feedings is vital, and the loan companies operating in such districts are particular to know in advance exactly

where the winter's feed supply is to be secured and whether all arrangements have been made to handle it. Increasing attention is also being given to the water supply, but recurring droughts could again wreck the best of plans.

The hazard of loss through dishonesty of borrowers is greatly reduced today. Trickery has been credited in many places with being responsible for a considerable percentage of the losses of loan companies in the period following the war. There were, indeed, some very glaring examples of fraud and, as is commonly the case in such instances, this news travelled rapidly, tending possibly to over-emphasize the importance of this source of loss as compared with less spectacular reasons. It is always in times of unusual strain that weaknesses of this kind become apparent. When conditions are reasonably good, the temptation to misappropriate funds or fraudulently to convert the collateral is small. Furthermore, the depression in cattle prices served to eliminate most of the undesirable characters from the industry.

There is still ample room for improvement in methods of livestock credit extension. While the foregoing paragraphs indicate that present methods are on the whole substantially better than those prevailing in former years, a distinctly erroneous impression would be here given if the reader were led to infer that the livestock loaning business has now been placed upon a thoroughly satisfactory

basis. In various respects present methods of banks and cattle loan agencies leave much to be desired. After examining the possible influence of the Intermediate Credit system we shall make numerous constructive suggestions designed to place the whole business upon a more scientific and enduring basis.

CHAPTER X

THE NEW INSTITUTIONS FINANCING LIVESTOCK

Attention was called in Chapter V to the relief that was afforded livestock producers in 1921 through the War Finance Corporation and certain other emergency institutions. The continued depression of the industry resulted in a persistent demand upon legislative bodies and administrative branches of government to evolve some new financial machinery that would prove of more than temporary benefit. This agitation finally resulted in the passage of the Agricultural Credits Act of 1923.[1] Rushed through Congress on the last day of the session as a compromise measure, this law embraced two quite divergent proposals (the Capper-McFadden bill and the Lenroot-Anderson bill). The former had proposed to authorize the formation of certain private agricultural loan companies; the latter contemplated a federal institution similar to the Federal Land Banks already in existence.

[1] See Benner, *The Federal Intermediate Credit System,* Chapter V.

I. THE INTERMEDIATE CREDIT SYSTEM

The Agricultural Credits Act of 1923 was designed to set up distinctively "intermediate credit" machinery. Such credits fall between ordinary "short-time" commercial credits and "long-time" real estate loans, and were defined in the Act as having maturities of from six months to three years. Farming and livestock loans in the past were made a part of the existing system of commercial banking. A great many loans were therefore made to mature in 90 days, and the practical limit was six months. While in actual practice agricultural loans were renewed, often many times, before finally being liquidated, yet in an emergency it was thought that such a system made the agricultural operator vulnerable and liable to be required to meet a debt maturing at a time when liquidation was either unwise or unwarranted. In the words of the late Henry C. Wallace, Secretary of Agriculture, "This act is designed to give the farmer the sort of credit he needs to produce efficiently and market in an orderly way the produce of the farm. It is an effort by Congress to meet the need which has been felt for at least 50 years."

The act provided, first, for the organization of Federal Intermediate Credit Banks and, second, for so-called National Agricultural Credit Corporations. The Federal Intermediate Credit Banks are 12 in

number. They are located in the same cities as the existing Federal Land Banks and are administered by the Federal Farm Loan Board. Each Federal Intermediate Credit Bank has an authorized capital of five million dollars, provided by the United States Treasury. These banks are authorized to discount notes, drafts, and other instruments originally given "for any agricultural purpose or for the raising, breeding, fattening, or marketing of livestock." They are also authorized to issue collateral trusts, debentures, or short-time bonds, secured by the notes or drafts which have been discounted. Such debentures, which are tax-exempt, are limited to 10 times the capital and surplus of the Federal Intermediate Credit Bank.[2]

These banks, it must be borne in mind, are strictly intermediary institutions; they are not authorized to loan direct to the producer. All of the paper which they handle comes to them by way of other financial agencies which are connected directly with the individual borrower.

The National Agricultural Credit Corporations are of two types: first, those with a capital of not less than a million dollars; and second, those with a minimum capital of $250,000. The smaller ones are privileged to make loans direct to the individual for any agricultural or livestock purpose. They may

[2] Up to the present time (March, 1926) only two millions of the authorized five millions of capital have been allocated to each bank.

also issue (taxable) debentures to a maximum of 10 times their capital and surplus. The larger Corporations are intended primarily as rediscount agencies to be located in the larger financial and market centers. They may make loans direct to producers, and have the additional privilege of rediscounting paper for other financial agencies (including the smaller National Agricultural Credit Corporations) and of buying and selling agricultural paper in the open market. They are thus a hybrid institution, at once a final lender to agricultural interests and an intermediary financial institution. Both of these types of corporations are under the supervision of the federal Comptroller of the Currency.

The provision for National Agricultural Credit Corporations has thus far been of little effect. In 1923-24 not a single corporation of either type was organized. Under the law as originally passed, they were not privileged to rediscount their paper with the Federal Intermediate Credit Banks, and this was regarded by many as a primary reason for their failure to be organized. Accordingly, upon recommendation of the President's Agricultural Commission, appointed late in 1924, Congress amended the Agricultural Credits Act in the spring of 1925 to permit all National Agricultural Credit Corporations to rediscount their paper with the Federal Intermediate Credit Banks. In the fall of 1925 two organizations were started in the West; one in San

Francisco, and the other in Black Foot, Idaho, both for the express purpose of financing the livestock industry.[3]

There are not sufficient advantages accorded National Agricultural Credit Corporations, in the judgment of most of those interested in financing the livestock industry, to warrant the formation of such organizations. The smaller types of National Agricultural Credit Corporations are in reality nothing more than ordinary livestock loan companies, with few of the privileges accorded such private companies and with several restrictions not applicable to a regular livestock loan company incorporated under state laws. They are limited in the following respects: first, they are required to maintain a reserve equal at all times to 7.5 per cent of their outstanding loans; second, only taxable debenture bonds can be issued; third, no individual loan can exceed 20 per cent of the corporation's capital and surplus; and, finally, they are under the general supervision of the Comptroller of the Currency.

The Agricultural Credits Act of 1923 *contemplated the formation of state agricultural credit corpora-*

[3] In December, 1925, two National Agricultural Credit Corporations were chartered to operate in Iowa. These companies, which were sponsored by a group of Chicago bankers, Iowa politicians, and farm interests, were announced to be only temporary, and it is expected that they will pass out of existence in the autumn of 1926. Their purpose, moreover, was to make loans exclusively on grain; and they were thus in no way connected with the livestock industry.

tions. Among the financial agencies and institutions mentioned in the Act for which the Federal Intermediate Credit Banks should rediscount paper, state agricultural credit corporations were specifically mentioned, although no such corporations were at the time in existence. It was evidently expected that this undefined agency would be developed under state law. Pursuant to this expectation, the Federal Farm Loan Board shortly defined an agricultural credit corporation as "a corporation organized under the laws of any state for the purpose of loaning money for agricultural purposes, or for the raising, breeding, fattening, or marketing of livestock.[4]

The Federal Farm Loan Board has laid down various rulings relating to the operations of these companies. The principal ones are as follows:

(1) The minimum paid-up capital of each corporation shall be $10,000, and the total rediscounts cannot exceed 10 times the amount of the paid-up and unimpaired capital and surplus.
(2) Every Agricultural Credit Corporation shall be under the supervision of the Federal Intermediate Credit Bank of the district in which it is located.
(3) Such corporations must submit to at least two examinations annually—the examination to be made either by a national bank examiner or by a land bank examiner.

Few agricultural credit corporations (state) have been formed for the purpose of livestock financing.

[4] Federal Farm Loan Board, *Circular No. 15,* Aug: 15, 1923, p. 11.

While a considerable number of such associations have been formed since 1923, most of the early ones were organized for the benefit of industries other than livestock. The chief reason for this is that under the disorganized condition prevailing in the industry the capital required for the organization of such companies was not available. As one writer pointed out: "Where there is no money for the immediate necessities of life it is useless to expect stockmen to finance the initiatory companies required by the Agricultural Credits Act."

Moreover, a large number of the loans available for such companies were not of a character that would have been acceptable for rediscounting at the Federal Intermediate Credit Banks. Between 1923 and 1925 the bulk of the loans were "hang-overs" of deals which had originated in the boom period of 1918 to 1920. Security was thus usually inadequate for the advance required, and the maker of the note was often a virtual bankrupt. There was much less opportunity for the agricultural credit corporation in connection with livestock during this period than in connection with other divisions of the agricultural industry. This is because livestock financial transactions entered into in any one year are carried over for several years—through the life of the stock on which the loans were granted. On the other hand, in the case of annual crops which can be warehoused, each year's crop provides a new volume of collateral available for new loans which

are not directly involved with the financial transactions of the preceding year.

A large number of the early agricultural credit corporations were intended for emergency purposes only. This was particularly true in the Northwest —in the Omaha and St. Paul districts. A great many tottering banks whose files were full of doubtful notes hoped that the new Federal Intermediate Credit Banks would take this paper off their hands in exchange for badly needed funds. In view of the known condition of such banks it seemed advantageous to unload this paper on the Federal Intermediate Credit Banks by indirect means. So a great many banks organized agricultural credit corporations with a minimum capital of $10,000, to which they endorsed, without recourse, the notes which were to be offered for rediscount at the Federal Intermediate Credit Banks.

The Federal Intermediate Credit Banks, however, took the stand that they were not themselves intended to act as emergency agencies. They accordingly established rediscount requirements that were practically as high as those of the city correspondents and of the Federal Reserve Banks. The life of these ill-conceived agricultural credit corporations was therefore short and bitter.

The present tendency is toward larger agricultural credit corporations intended to be permanent. The attitude of practically all the managers of the Federal Intermediate Credit Banks in those dis-

tricts where the livestock industry is important is now one of encouragement in the formation of agricultural credit corporations of this nature. This attitude is well illustrated in the following statement by R. D. Johnson, Treasurer of the Federal Intermediate Credit Bank of Houston:

> And if the proper number of well-managed rediscounting agencies with substantial capital and proper location may be secured, we feel that our entire territory will be well served and that the demand for intermediate bank loans will continue to grow in volume. Repeated efforts have been made to form rediscounting agencies that would have a capital sufficient to interest capable management, but in many instances these efforts have failed, since it has been difficult to obtain the needed capital in the cattle country where conditions have been extremely bad ever since 1920.[5]

It is the opinion of most of the managers of the Federal Intermediate Credit Banks that the necessity for companies with greater capital is being recognized. For example, Mr. Ward M. Buckles, Manager of the Federal Intermediate Credit Bank of Spokane, in referring to the livestock business of that district in 1925, states: "On the whole business is increased, due to the fact that the new companies organize for a larger capital and operate in a wider territory." In the Omaha district in 1925 the number of rediscounting concerns decreased, but the volume of business and the number of borrowers served increased.

[5] Personal letter to the writer, dated Feb. 5, 1926.

There has been very little rediscounting of livestock paper with the Federal Intermediate Credit Banks. The agencies specified by the Agricultural Credits Act for which paper might be rediscounted were the existing national and state banks, livestock loan companies, co-operative banks and associations, and state agricultural credit corporations. The National Agricultural Credit Corporations, as we have seen, have not been developed, and the state agricultural credit corporations have not as yet become important—particularly so far as the livestock industry is concerned. Co-operative banks and associations play practically no rôle in connection with livestock financing, as they are ill-adapted to the needs of that industry. State and national banks have not seen fit to depart from their normal correspondent relationships in order to avail themselves of the credit resources offered by these new institutions. The same is true of the old established livestock loan companies.

The reasons for the failure of existing cattle loan companies to join the Federal Intermediate Credit system are various: (1) there has always been a certain antipathy to the system because of the "red tape" involved in procuring accommodations; (2) if they discount any of their paper with the Federal Intermediate Credit Banks they are required to discount all of it there; (3) the spread allowed between the interest rate charged and the rediscount rate of the bank was reduced to a point which, when

coupled with a maximum volume of rediscounts in proportion to the capital, has served to restrict the earnings; (4) cattle loan companies which are in good condition can get all the funds they need from their customary sources, while companies which are in bad straits cannot offer security suitable for the Intermediate Credit agencies to accept.

As a result of this situation, the rediscounts of livestock paper have been almost negligible. At the beginning of 1926 the total rediscounts classified under the account of livestock loan companies in the official statements of the Federal Intermediate Credit Banks stood at $9,614,000. In addition, there was doubtless some rediscounted livestock paper under the classification of agricultural credit corporations; but of the $15,269,000 total rediscounts for such corporations it is improbable that more than two or three millions were for livestock purposes. Since the total rediscounts of the national and state banks, savings banks, and trust companies for all purposes at the Federal Intermediate Credit Banks were only $508,000, it is apparent that practically no aid was rendered to the livestock industry through this channel. Thus, all told, the Federal Intermediate Credit banks at the beginning of 1926 were assisting the livestock industry to the extent of only 12 or 13 million dollars. While no figures are available, it is probable that the total loans outstanding outside the Federal Intermediate Credit system for the livestock indus-

try run into hundreds of millions of dollars. For example, a single livestock loan company operating in Kansas City had outstanding at one time loans aggregating approximately 6.5 millions of dollars. There were in the past any number of the older cattle loan companies which individually had more loans outstanding than all of the 12 Federal Intermediate Credit Banks have at the present.

Nevertheless, there is a tendency toward an increasing use of Federal Intermediate Credit Bank facilities. While the figures show only a moderate increase, the testimony of the managers of these banks is unanimously to the effect that rediscounting of livestock paper at the Federal Intermediate Credit Banks will show a steady expansion.

Sheepmen have scarcely used the system at all except for wool financing. Sheep production in general has been financed more fully than cattle production through the local banks. Sheep raisers have had less recourse to livestock loan companies in the past, and this means practically no recourse now to the Federal Intermediate Credit system. A very small number of loans have been made to sheep and goat producers in the Houston district and a small volume of loans has been made on sheep in the Spokane district. A letter from this district indicates that the majority of loan companies operating there have not made applications for rediscount privileges with the Federal Intermediate Credit Banks.

Some realization of the possibilities of using the Federal Intermediate Credit Banks to advantage is, however, beginning to be noticed among sheep producers. Some conventions of sheepmen have passed resolutions endorsing the work of the Federal Intermediate Credit Banks and urging that the facilities which they offer be used. Wool production affords an excellent opportunity for financing by the Federal Intermediate Credit Banks. Wool is a product which can be warehoused easily and stored for long periods of time. It is capable of rather close grading so that definite advances can be made against each particular consignment. Furthermore, a large number of sheepmen are in the habit of borrowing against their wool in case it is not sold promptly in the spring in order to have funds to carry the operating expenses of the flock up to the season when the lamb crop is available for revenue. Finally, the progress of co-operative wool marketing organizations tends to stimulate and facilitate this method of financing.

II. POLICIES OF THE INTERMEDIATE CREDIT BANKS

The operations of the agricultural credit corporations are subject to the regulation and general supervision of the Federal Intermediate Credit Banks of the particular district in which the organizations are located. The credit policies and practices of agricultural credit corporations therefore are merely the policies of the Federal Intermediate

Credit Banks themselves, subject to the general control of the Federal Farm Loan Board.

The present attitude of the Federal Intermediate Credit Banks is favorable to the livestock industry. Following an early period of caution and lack of interest in the livestock situation, the Intermediate Credit Banks have recently adopted an attitude of sympathetic co-operation toward agricultural credit corporations. As the management of the bank at Omaha expresses it, "We are endeavoring to aid and assist agricultural credit corporations, particularly those which we believe to have been organized with an idea of permanency."

The policies of the Federal Intermediate Credit Banks are covered in the general rules and regulations which have been adopted to govern the operations of agricultural credit corporations. The various orders which have been issued from time to time, in part by the Federal Farm Board and in part by the Intermediate Credit Banks themselves, relate in the main to the following subjects: (1) control of interest rates; (2) regulation of the size of individual loans in proportion to the company's capital; (3) limitation of the total volume of loans that will be accepted from a particular company; (4) control over the percentage of value that may be loaned; (5) supervision over the details as to how the loans are to be made; (6) inspections by approved inspectors, who are directly under the orders of the Federal Intermediate Credit Banks.

On the whole, these rules and regulations have been intended to apply as far as possible to all companies rediscounting with the Federal Intermediate Credit Banks. It is patent, however, that no set of general regulations can be applied to each and every specific transaction. In fact, in the early months of operation the attempt on the part of the management of the banks to apply general rules to every case worked innumerable hardships and were so impracticable that a great many men became rather disgusted with the whole Intermediate Credit system. Livestock men had been accustomed to borrowing money and obtaining loans with considerable dispatch, and the customs of the trade were such as were necessary to fit their particular requirements. Inasmuch as most of the cattle were bought on the central markets or on the range, and since the transaction had to be made practically on the spur of the moment or not at all, it was impossible to go through the large number of preliminaries which the Intermediate Credit Banks required at the start.

The Federal Intermediate Credit Banks have made a worthy effort to eliminate "red tape." It was inevitable that governmentally created and managed institutions would be suspected from the start of indulging in excessive "red tape." It was, in fact, openly charged in many places that the new system was unnecessarily bureaucratic. Moreover, there was undoubtedly ground for the view that the

management of some of the banks was either not sufficiently alert and prompt, or that they were imposing too many regulations and too much system. On the other hand, a great many customers and many of those outside the industry failed to understand that, from the nature of the transactions which the Federal Intermediate Credit Banks were to handle for the livestock industry, there must naturally be some delays. Too often the customer has been accustomed to walk into his local bank and within ten minutes complete an entire loan transaction, and walk out with either cash or a credit entry in his bank book. The borrower fails to appreciate the difference between a transaction of this nature and a loan made with an outside institution, whether a cattle loan company or an agricultural credit corporation.

The rules and regulations of the banks are rapidly becoming more practical. It is now possible for cattlemen to purchase cattle at any of the central markets and have the stock paid for and the paper handled through a Federal Intermediate Credit Bank. Range transactions are also handled about as expeditiously. There is still room, however, for considerable progress in making more practical the manner in which loans can be completed in order that it will fit the necessities and customs of the cattle trade. The management of these banks must constantly be on the alert to keep out of the business the element of officiousness and an undue im-

position of system which will slow up action on individual transactions. At the same time, stockmen need to accustom themselves to more exact methods of handling business transactions.

The operations of the Federal Intermediate Credit Banks have had an effect upon loans on breeding herds. It is almost unanimously agreed that the policies of these banks in accepting loans on breeding herds during the fall of 1923 and during 1924 had a very important and bracing effect upon the market for breeding stock, as almost all other agencies were opposed to new cow loans at the time. This policy of assistance to the producer was particularly helpful in the Houston district. The attitude of the management there was very liberal whenever the proposition was sound and the borrower not unduly involved. In other words, the tendency was to go the limit consistent with careful business principles.

The Federal Intermediate Credit Banks have also exerted some influence in connection with interest rates. The direct effect has not been important, since comparatively little paper has been rediscounted at the Federal Intermediate Credit Banks. The indirect effects upon the interest rates charged by other institutions has, however, been of real significance. It seems certain that the Federal Intermediate Credit Banks will exert a permanent influence in maintaining equitable and uniform charges by all institutions concerned with livestock

financing. The favor with which investors have come to look upon the debentures of the Federal Intermediate Credit Banks issued on the basis of livestock loans has, moreover, reacted favorably upon cattle paper in general.

The Federal Intermediate Credit system is still in the stage of infancy. While it seems evident that this institution should do much toward establishing sound principles in this department of finance and toward standardizing well-considered practices of handling the business, the whole general structure of livestock financing as it has developed in the past, and as it is still being handled, is inadequate and faulty in many respects. The industry is one which depends upon borrowed capital to an extent unmatched by almost any other line of business. The problem of controlling the flow of this capital wisely and safely has by no means been solved; credit comes in so freely as to accentuate the advance of prices and expansion of production in boom times, and draws away unceremoniously when prices fall, leaving the producer unsupported in his hour of need. There has never been any harmonious co-ordination between the producer's operations and the institutions financing the industry. In our final chapters we shall consider the possibilities of a better adjustment of credit methods and policies with the organization of production.

CHAPTER XI

NECESSARY IMPROVEMENTS IN LIVESTOCK FINANCING

The preceding chapters have endeavored to make three points clear; first, that some of the difficulties with which livestock producers have been confronted are the outgrowth of general economic changes and maladjustments over which they can have no control; second, that to some extent these difficulties reflect the lack of effective organization of the industry; and, third, that an unsatisfactory system of livestock finance has contributed to the vicissitudes which have beset the business. In this and the final chapter we shall endeavor to indicate the ways in which improved financial methods can be made to promote the stabilization of the livestock industry in the United States.

It should be emphasized at the outset that no new type of institution for financing livestock producers is required. Financial agencies and institutions exist in sufficient variety; there are no gaps in the agricultural credit structure which remain to be filled. The improvements required must come through changes in the management and control of

existing institutions rather than through the creation of new types of financial agencies.

Nor should any of the institutions which now advance funds to the livestock industry be abandoned. The local banks are required in the Western states mainly for other purposes than livestock financing, and it is not only inevitable but also desirable that they should continue to provide a portion of the funds for livestock borrowers. The nature of the cattle and sheep industry, however, is such that local banks can probably never be expected to furnish all of the funds required. The conditions which originally led to the development of livestock loan companies have not been changed. Cattle and sheep will continue to be produced in relatively large units in rather undeveloped areas, and in the very nature of the case the financial accommodations of such areas are insufficient for the needs of the livestock industry. This is true not only in the range country, but it applies also in the more settled semi-farming regions and even in sections of the Corn Belt. City banks, because of the distances involved, are not themselves in a position to make the detailed investigation of the borrower that is required. While stockyard banks make some loans to stockmen direct, for most city banks direct loaning is impracticable. Livestock loan companies will therefore always be required as a connecting link between the borrower and outside sources of funds. Finally, commission companies have a small

but permanent field of usefulness, and the Federal Intermediate Credit system is just upon the threshold of its career in this field.

In the following pages methods will be outlined which meet three primary tests of a good system of livestock financing. (1.) The institutions which extend credit to the cattle industry should always base their credit extensions upon adequate knowledge and exert a constructive influence in the direction of improved management, thus preventing waste and loss alike to financiers and producers. (2.) They should have adequate knowledge of the amount of cattle paper outstanding and should exert themselves to control credit extension during periods of boom, thus restraining periodic overdevelopment of the industry. (3.) They must sustain the industry during periods of unavoidable depression, developing a permanent market for livestock paper such that the cattle industry will not be thrown back upon its own inadequate resources at the very time when it is most in need of financial support.

The elimination of past defects in our system calls for effective co-operation of livestock producers, local banks, and livestock loan companies directly connected with the livestock industry and the outside financial institutions which purchase livestock paper. While no particular group can be charged with primary responsibility for reform, it is possible that as time passes the Federal Intermediate Credit

Banks will come to play an ever-increasing rôle in co-ordinating effort and stabilizing conditions in the industry.

I. IMPROVEMENTS IN LENDING METHODS

A discussion of the ways in which improved credit methods may aid in stabilizing the livestock industry must relate, first, to specific requirements in connection with the making of individual loans and, second, to more general policies designed to affect the organization and functioning of the industry as a whole. The present section is concerned only with problems relating to credit extension to individual borrowers. This discussion divides itself into two parts, relating respectively to the rôle played, (a) by banks and livestock loan agencies which advance money directly to producers, and (b) by outside financial institutions which are the final purchasers of livestock paper.

A. LENDING METHODS OF BANKS AND LIVESTOCK LOAN AGENCIES

If the losses resulting from livestock financing are to be reduced to a minimum, the institutions which make loans to the industry must base their credit extension upon definite knowledge not only of the borrower's present financial condition but of his managerial capacity as well. In other words, there must be a vast improvement in methods of credit

analysis in connection with the livestock loan business.

The requirement that the borrower give a chattel mortgage does not dispense with the necessity for a careful credit analysis. The chattel mortgage is of course duly recorded and thus constitutes a legal notice to third parties of the existence of the lender's lien.[1] And if the collateral is moved outside the county or even outside the state the stock can be traced by its brand and repossessed from any innocent purchaser. Nevertheless, if the borrower is dishonest, the collateral may be disposed of and the lending company may have great difficulty in making collections. Moreover, even when the borrower is not dishonest, sudden changes in conditions may so lessen the value of the collateral as to result in loss to the lender unless the borrower has other resources. There have been many cases where defalcation has caused losses equal to 100 per cent of the original loan, where the loan itself was equal

[1] Lack of uniformity in chattel mortgage laws of the various states leads to confusion and opens the way for the evasion of obligations. It has often been very difficult to obtain relief or redress in civil and criminal cases involving wrongful conversion of the collateral or actual stealing of the stock. As late as 1922-23 a great many loan companies found that it was difficult to secure a conviction, regardless of the evidence, before any jury in the culprit's home county. There is always the possibility also that any infraction of the law by the mortgagee committed in endeavoring to protect his interests might react upon himself and bring on a suit for damages on some technical basis. In such instances the loan company is usually found guilty in the local court, making it necessary for the case to be appealed to higher courts, where redress usually is obtained.

to 25 or even 50 per cent of the entire capital of the loan company.

The carrying of insurance by borrowers should be required wherever protection can be thus secured. In sections where cattle are fattened, it is an almost universal custom to carry insurance against fire, lightning, and tornado. The losses from disease in the feeding areas are nearly negligible. In the range states the producer of extensive herds grazing over wide areas in reality has his own fire, lightning, and tornado risk pretty well distributed. The small operator in the ranges should undoubtedly insure against natural hazards, but the real hazards on the range arise largely from uncertain feed and shelter, and the losses from starvation and exposure are at times very heavy. These perils cannot be underwritten.

A brief but comprehensive form of financial statement is needed as a basis for credit analysis. During the past 30 years city banks have very greatly aided in the development of better business methods by requiring their borrowers to meet certain property tests, in addition to the character test, which is of course always indispensable, and they have developed certain general principles of credit analysis based upon these financial records of borrowers. Because of the close informal relationships which obtain in the country, as well as because of the lack of adequate accounting methods,[2] such credit analy-

[2] The character of the records kept by livestock men is well

sis has not developed very extensively in connection with agricultural lending. But when it is realized that a man who has 1,000 cows has a business investment approximately equivalent to that of a $200,000 corporation, it will be seen that there is a genuine need for the introduction of modern accounting methods as a basis for borrowers' statements.

The Federal Reserve Banks have to a limited extent stimulated the use of financial statements, but on the whole, even today, little use is made of financial records in connection with livestock loans. Bankers are prone to be satisfied with what they regard as intimate acquaintance with the financial affairs of their clients. The banker usually knows the amount of indebtedness on the land and is familiar in a general way with the amount of stock and assets which the customer has. But surprisingly often a sworn statement reveals that the borrower has been running behind and has been borrowing from private sources—from his family and friends and even from other institutions. A relatively small amount of such outside borrowing, if

summarized in a personal letter to the writer by a prominent livestock financier as follows: "Many of the borrowers are accustomed to keeping their records in little memorandum books, and their success has really been dependent upon the natural growth of an animal and an advancing market. We have found that in nearly every case, the borrower was not able to produce actual figures to show his cost of operations. It was largely guesswork. The livestock industry grew up in the Far West on very cheap or entirely free land, and the method of conducting this business seems not to have changed with changing values in land."

not known to the banker, can completely upset calculations and destroy the assumed liquidity of the loan. A complete inventory, such as is revealed by a financial statement, not infrequently produces a very different impression than the banker is able to obtain from mere acquaintance with the borrower and inspection of his premises.

Whatever may be true of many phases of agriculture, it cannot be fairly contended that financial statements are typically impossible in connection with the livestock industry. Livestock operations are sufficiently large and sufficiently systematized to make the use of financial statements feasible. Nor should the practice be objected to on the ground that it is inquisitorial in character. In the past the independent cattleman has tended to resent any prying into his affairs, and the lender has often hesitated to ask very many questions. The disastrous consequences resulting from such a policy are too fresh in the recollection of cattle lenders to require illustration here. In stimulating better business methods in livestock production it is not necessary for the credit institution to meddle in the borrower's affairs; it is merely necessary to insist that borrowers who are unwilling to conform to certain general practices and to furnish the information required must look elsewhere for their credit accommodations. The time has certainly come when methods employed in the livestock industry should be on the same plane with those which

have been found successful elsewhere. Whatever the familiarity of the banker or loan company manager with the affairs of a particular customer, a statement should be required as a matter of course in order to promote a universal improvement in livestock business methods.

A form of statement sufficiently detailed to show the essentials of the borrower's financial condition will be found in Appendix A. In brief, this statement should reveal the following information.

(1) The proportion of liquid assets to current liabilities.
(2) The proportion of fixed assets to fixed liabilities.
(3) The proportion of the fixed assets to the liquid assets.
(4) The maturity dates of the current liabilities.
(5) The maturity dates of the fixed liabilities.
(6) The net assets of the borrower which would be available, over and above the collateral itself, for meeting payments on the loan.
(7) The amount and character of contingent liabilities.
(8) The adequacy of the feed available for the livestock during the life of the loan.

The financial statement makes possible an appraisal of the borrower's credit rating. The comparison of the volume of liquid assets with the volume of current liabilities is of major importance. The borrower has undertaken during a certain number of months to meet a certain total of obligations, including the loan under consideration. The lender therefore wishes to know the sources from which the

funds are to come for meeting these obligations. If the borrower is to continue in business he cannot sell his land or fixed capital, and he must accordingly depend upon the receipts from his so-called liquid assets, consisting chiefly of livestock on hand. In the normal course of events, the cattleman expects to pay off his loans as he sells "finished" stock.

In commercial lending a general practice has been evolved of requiring that the borrower have liquid assets equal to at least twice the amount of the current liabilities. No exact rule of this character can, however, be made to fit all cases or to apply to changing conditions. This is particularly true of the livestock industry. A different ratio would be required in different divisions of the industry and also with different borrowers, who are differently circumstanced. It is for this reason that the other information listed above is helpful. With all the information called for in hand, the lender is able to arrive at a much more adequate understanding of the risks involved.

The borrower should also demonstrate that he is in a genuinely solvent condition. That is to say, the borrower should be able to show that his budget is balanced. Since the lender typically makes loans to a given customer year in and year out, it is not sufficient that the borrower be able to show that he has enough liquid assets to meet a particular loan; for unless the borrower is in a really solvent condition and able to show some net earnings at the end

of each year, sooner or later the lender is certain to be faced with default on loans. Very little attention has ordinarily been given to the matter of the net earning capacity of the borrower, and little thought has been given to the question whether the carrying through of the borrower's existing plans would probably show a profit. The importance of appraising the borrower's operations as a whole rather than merely specific transactions has been revealed in every period of depression in the industry.

Some companies keep track of the borrower's operations by insisting upon a new financial statement at intervals of six months or a year. It would be desirable to obtain also a profit and loss statement similar to that furnished by mercantile and manufacturing organizations, but it is impracticable to obtain this from livestock producers. This being the case, it is an excellent practice for loan companies to insist upon new financial statements at frequent intervals. From these a fairly close comparison of the profit and loss accounts of two successive periods is possible, and it can be determined accordingly whether the customer is on a sound basis of operations. The practice should be adopted by all livestock loan agencies.

Certain principles of credit extension should be followed by the lending agency. Along with their investigation of the borrower's general character and integrity and their analysis of his financial state-

ments, a number of general rules should be kept in mind by all lenders. A brief statement may be made with reference to several of such issues.

The difference in values between individual herds should be clearly recognized. There has been a tendency on the part of all companies to place too much stress on general values and not enough on specific values. Regardless of variations in the value of herds, it has been customary to loan so much per head—yearlings, two-year olds, what-not—as though cattle were as standardized as grain. A great many losses can be traced directly to this failure to recognize differences in the quality of herds.

The margin on range loans should be considerably greater than on feeder loans. The risks vary widely in different types of loans, and it is surprising that there is so little realization of the relative risks between feeder loans in the Corn Belt and loans on range cattle. Companies loaning exclusively in the Corn Belt unanimously report very small losses. This is because the feed consumed by a steer in the feed lot represents a substantial margin on the loan. For example, a $50 steer will in from six to nine months eat from $50 to $75 worth of grain and other feed. At the same time the quality of the animal is improving so that the finished product yields a higher price per pound. The feed provided by the range cattleman, however, represents only a small proportion of the total value of the animal.

Only grass is furnished, and the supply of this is never absolutely certain for any extended period of time. Moreover, the animal at the end of the loan period is ordinarily worth no more per pound than at the beginning. The gains in weight are comparatively small, the weather hazards enormous. A much larger margin is therefore required in the case of range loans.

No rule applicable to all cases can be laid down as to the percentage of cost price which can safely be loaned. A larger percentage can be advanced on steers than on cow herds, and as just indicated a larger percentage can be advanced on feeders than on range cattle. Larger loans can also be made in the case of borrowers whose financial statements indicate a strong position and who are known to have outside financial resources.

Individual loans should commonly be limited to 50 per cent of the capital and surplus of the loan company. This is in accordance with the ruling of the Federal Intermediate Credit Banks, and some companies have expressed themselves as in accord with this as a general principle. The tendency has been, however, to make exceptions here and there where the loan company feels certain that the conditions are exceptionally favorable. In the past there has undoubtedly been a tendency toward undue concentration of loans, and many failures of livestock loan companies have resulted in consequence. It would be a wise policy never to de-

part from this rule, limiting individual loans to 50 per cent of the capital and surplus of the loaning organization.

The duration of cattle loans is not as important as is commonly believed. In the past the length of the paper commonly did not conform with the normal turnover of the product. A great many feeding loans, for example, were made to mature in from 90 to 120 days, whereas the feeding period was commonly somewhat longer than that. Stock cattle and breeding herd loans were usually made for six months—a period conceded to bear little relation to the time required for a turnover. This difficulty was then overcome by a process of renewing the paper from one to five times, as might be required. The borrower found this an unsatisfactory system, since if conditions were unfavorable at the date of maturity he was often forced to liquidate and thus wreck all his plans.

The amendment of the Federal Reserve Act, which permits Federal Reserve Banks to accept livestock paper with a maturity of nine months, and the provision whereby Federal Intermediate Credit Banks can rediscount paper made for one year's time, have not changed the essentials of the problem. Loans of from nine to twelve months are of ample duration for the financing of the feeding of stock, but in the case of stock cattle and breeding herds the renewal problem has not been eliminated, for the period required for a turnover is more than

nine or twelve months. The date of renewal has merely been shifted from six months after the loan was made to nine or twelve months thereafter.

Loans on stock and breeding herds must either be made for a considerably longer period, or else renewals must be permitted and looked upon with favor. In the past banks commonly made as many renewals as were necessary (so long as conditions were favorable) to complete the livestock operation for which the loan was originally extended, but the practice has been viewed with disfavor by bank examiners and by many bankers who hold to the view that loans should be completely liquidated at least once each year. Some bankers even insist that every particular loan should be paid at maturity even though the very next day or week they would be glad to extend the same amount of credit again to the same borrower. It has been the custom of bank examiners to mark a loan that had run longer than one year as "slow;" if the same loan was in the bank when next examined, to mark it "doubtful;" and if it was still there six months later, to mark it "bad." This practice is of course absurd when looked at from the standpoint of the soundness of the loan. The principle of requiring every loan to be paid at maturity, with a view of maintaining complete liquidity of bank assets, runs directly counter to the needs of a considerable part of the livestock industry.

A system of amortized loans on breeding stock

should be developed. Breeding loans in reality partake of the nature of a capital investment, and it is absolutely useless to expect such loans normally to be paid in less than two or three years. Under the present system of renewing breeding loans at the end of each six months' period, the borrower usually pays the interest but makes no effort to reduce the principal. A system of amortized breeding loans would offer an additional incentive for the producer to build up an equity in the stock. Through the Federal Land Banks a system of great value to landowners has been devised by providing that the borrower shall pay each year a definite sum which covers the interest and retires a small percentage of the principal. Amortized breeding loans could be handled in a similar way. Loans should be made for from three to five years with a periodical payment sufficient to cover interest and to reduce the principal by a definite amount.

In order that the lender may exercise some control over the borrower's operations, as is the case under the renewal system, the loans should be made callable for cause on any successive interest and principal payment date, just as on farm mortgages. The failure of the borrower to comply with the conditions imposed under the chattel mortgage covering the livestock would automatically make it due and payable. This provision would remove the main objection that has been made to amortized loans on breeding herds.

Amortized breeding loans have also been objected to on the ground that there would be no market for such paper. This objection, however, no longer has force, since the Federal Intermediate Credit system has made it possible to market debentures based upon such loans.

B. THE INVESTIGATION WHICH PURCHASERS OF LIVESTOCK PAPER SHOULD MAKE

The correspondent banks of financial centers and the Federal Intermediate Credit Banks are the principal outside purchasers of livestock paper. Since these institutions are usually located at a considerable distance from the borrowers, it is of course impossible for them to make a first-hand credit analysis of each loan applicant. It is nevertheless incumbent upon them to minimize their own losses on livestock paper by working out certain general guiding principles to govern the purchase of such paper. Moreover, if the purchasers of paper require that all paper shall meet certain tests, they will exert a constructive influence upon the livestock loan business in general.

In the past the purchasers of livestock paper have operated on a rather casual basis. The cattle loan business in its present form had its rapid growth during the period of rising prices prior to and during the Great War. Such paper had many attractive features. So long as conditions were favorable the city correspondent bank which purchased the

paper was practically certain to have its loans paid at maturity. It was argued that the loans were based upon a consumptive necessity, that the funds were advanced for a specific purpose which would insure their payment at maturity, that they were protected by a chattel mortgage, and that the paper was endorsed by a responsible loan agency. A breakdown such as that which came in 1919-20 was perhaps necessary in order to convince the purchasers of livestock paper that improved methods of credit analysis on their part were necessary.

The purchaser of cattle paper must investigate the credit standing of the bank or loan company which endorses the paper. Too often loans have been purchased from livestock loan companies without any real knowledge of the standing of the company. In fact, the majority of institutions have not in the past made a systematic and careful credit analysis of the institution which endorsed livestock paper and guaranteed its payment. A large part of the information required can be obtained by studying the past history of the company's operations. The questions to be considered are: (a) the individuals who are behind the company; (b) the reputation of any allied institutions; (c) the company's record for promptness in meeting obligations; (d) the amount of the capital and surplus; (e) the proportion of rediscounts to capital; (f) the size of the company's individual loans in proportion to the company's capital.

The data with reference to the amount of loans rediscounted should be ascertained from a financial statement of the company. Because of the rapidity with which conditions may change, such a statement should not be over 30 days old. An undue expansion of rediscounts in proportion to capital proved to be a prolific source of trouble to investors in paper in 1921. There were two chief reasons: first and most important, even a moderate percentage of losses on an enormous volume of loans meant losses quite out of proportion to the ability of the organization to absorb them; and second, such an expansion of rediscounts is itself usually an evidence of extravagant notions and lax business methods on the part of the company.

The importance of scrutinizing the size of individual loans in proportion to the company's capital may be illustrated by a concrete example. In 1920 a company with a capital and surplus of $100,000 had made a single loan for as much as $250,000, and it had several loans in excess of its own capital. A loss of 20 per cent on the $250,000 loan would wipe out half the capital and surplus of the endorsing company.

The purchaser of paper must study the loan policies of the endorsing company. He must know not only the general policies pursued by the company, but also the specific credit requirements which the company has itself adopted in its relations with its borrowers. The safety of the paper purchased

by the city bank will always depend more upon the financial reliability and status of the final borrower than upon the intermediary lending company. Accordingly, it is of the first importance for the purchaser of paper to know that the loan company's general policies are such as to insure that its paper will be uniformly of high quality. In this connection it is important for the purchaser to recognize the differences that exist in different sections of the country. A policy of making loans up to 50 per cent of the valuation in some sections of the range country is not as conservative as making a loan up to 100 per cent of the value of the collateral on feeding loans in Iowa. The general conditions of the region where the cattle are located must always be carefully considered.

The purchasers of livestock paper should distribute their risks. That is to say, they should not confine their purchases to a single company but should purchase from several companies or banks. They should also purchase paper from different geographical districts, with a view to avoiding heavy losses due to unforeseen developments in any particular region. There should also be some distribution among the various types of paper—feeder, stock, and breeding loans. While as large a degree of safety might be obtained by concentrating on feeding loans, for example, it is important that no type of paper should be discriminated against, lest that portion of the industry be crippled.

The purchaser of livestock paper should always buy a complete loan. This is a desirable practice because in the event of an emergency due to the failure of the rediscounting agency, the purchaser of the paper is in a position to take possession of the collateral covered by the loan purchased without undue legal complications or delay. In the event that the purchaser of the paper holds only a part of the loan, other holders of the paper are involved as well, and in order that everyone's interest may be protected a trustee has to be appointed and other legal formalities completed, which make a very complicated and expensive procedure and prevent the exercise of unrestrained action on the part of each individual paper buyer interested in the loan. It is true that in the case of a small buyer it is not always possible to obtain complete loans, but this is the exception rather than the rule. Any deviation from the practice of buying complete loans paves the way for an unlimited amount of trouble in case an emergency arises.

A strong bank back of the cattle loan company is of importance to the buyer of paper. In 1917-18 the writer pointed out the advantages to cattle paper buyers of purchasing securities from companies that were strongly connected.[3] The events of late 1920 and succeeding years clearly demonstrated that

[3] *The Cattle Loan Company*, a dissertation submitted to the faculty of the School of Commerce and Administration of the University of Chicago in candidacy for the degree of Master of Arts, Chicago, 1918, Chapter V.

investors following this course of action were exceptionally fortunate.

A great many of the banks connected with loan companies were the so-called "packer" banks, controlled by various packers, their families, and associates. There were also some other institutions in almost every livestock center which had loan companies affiliated with them. It was impossible for a strong bank to allow any paper of the affiliated loan company to default without placing the continued operation of the bank itself in danger, as well as injuring the reputation of the institution which had been slowly built up over a long period of years. Banks often met their losses by drawing on enormous surpluses that had been accumulated. Assessments were made frequently until directors and stockholders themselves were practically helpless to go further. Loans secured by doubtful collateral were taken up from the investors and put into the note files of the bank. Bank examiners, under the influence of absolute necessity, allowed these loans to be carried along from month to month and from year to year. As fast as the banks were able to charge off losses, proportionate amounts were deducted from the worst loans. This process has been continually going on, and will probably continue for some institutions even from two to five years longer. As far as investors are concerned, however, with perhaps only three or four exceptions in the United States,

no losses have reached the purchasers of cattle paper when such paper was bought through a loan company connected with a bank of strong affiliations.

The bank should place the responsibility for buying livestock paper upon a small well-informed committee. The majority of commercial banks purchasing paper of this character have depended in the main for their policies upon the decision of a Board of Directors consisting of from 15 to 25 business men. As a general rule all or nearly all are absolutely unfamiliar with the livestock business. Even the fundamentals of it are barely understood by most of them. A committee of two or three competent officers should be appointed whose business it would be thoroughly to familiarize itself with the fundamentals of livestock paper. It is also important that a committee of this character keep in close touch with changing conditions affecting the industry and with shifting trends within the industry itself. Such a plan would not only eliminate losses but would establish the same degree of confidence in livestock paper as attaches to the paper of other industries with which the typical bank directorate is more familiar.

II. CONTROL OF THE VOLUME OF CREDIT

One of the greatest causes of unstable conditions in the livestock industry has been the tendency of livestock lending agencies to be swayed unduly by the great major swings of business activity. Both

the banks and the livestock loan companies have "followed the crowd" instead of exerting helpful, constructive, and, at times, corrective service through their handling of credit operations.

There are cycles of high and low "loaning initiative" among institutions financing the livestock industry. Instead of a consistent policy of extending credit in accordance with production requirements, livestock financing is periodically conservative and liberal. Unfortunately, the cycle of "loaning initiative" tends to lag behind production requirements. Following a collapse in livestock prices, the financial institutions lose confidence in the industry. A fetish is made of safety, and liquidation is pressed until production in the industry reaches a point sufficiently low for the remaining producers to find a demand for their products at profitable prices. There is then a new demand for banking accommodations, but this the banks are slow to extend. In fact, instead of anticipating the change in the production and price situation and thus facilitating the recovery from the period of depression, the banks hold back and actually delay the process of recovery.

In due course, however, rising cattle prices and increasing profits result in bringing the industry once more into good favor. By progressive stages the conservatism of the bankers changes to optimism, and instead of acting as a restraining influence against the excessive production, which will even-

tually result in a new decline of prices, they show little foresight and, through liberal loan policies, help to promote the crisis which they should seek to avoid. In fact, the decline of prices usually sets in before the bankers begin to think about changing their policies.

These cycles of "loaning initiative" are well illustrated in the period since 1921. The year 1921 is a striking example of the lack of "loaning initiative" on the part of bankers in the feeding areas. After the collapse of 1920, conditions had gradually improved in the cattle and sheep feeding areas, and by the latter part of 1921 on account of low prices of livestock and abundance of cheap feed the opportunities for profitable feeding operations were very good. But the feeders were unable to obtain sufficient funds from their usual financial connections. It is true that there was a scarcity of funds at the time in some parts of the feeding area, but there was not so great a shortage that these requirements could not have been met.

Banking psychology turned particularly against loans on breeding herds, which proved less liquid in 1920-21 than loans on stock or feeding cattle. As a result, it became practically impossible from 1921 to 1925 for owners of breeding herds to procure credit. As late as the first quarter of 1925 there was a clear antipathy on the part of almost every bank or loan company against a cow loan in any form. One banker made the statement that it was

at that time easier to get a $20 loan on a calf than a $15 loan on its mother. It was not until the end of 1925 that bankers began to look with much favor upon breeding loans. If the cattle industry recovers as the sheep industry has,[4] it is probable that cow loans will again be as freely granted as in former times.

The extreme conservatism on the part of both bankers and cattle loan companies has recently been giving place to more liberal lending policies. While many institutions are still in a nervous condition, there has been an important change in attitude during the last year or so. For example, one company in Kansas City, which at the beginning of 1925 had about $2,250,000 of loans outstanding, had increased this to almost $6,500,000 by the end of the year. Purchasers of paper are also beginning to make inquiries. There is little doubt that if the livestock business registers continued improvement, funds will again be freely extended to the cattle industry —in time perhaps too freely.

Lending agencies must keep themselves thoroughly informed regarding fundamental trends in the industry. Financial losses such as have occurred in recent years will never be averted, nor will the industry itself be on a healthy basis, until these

[4] Sheep breeding loans are, however, somewhat more liquid. This is due not only to the fact that animals are marketed at a younger age, but also because there is a wool crop to be marketed each year. This greater liquidity of breeding loans in the sheep industry renders the business more suitable for handling through regular banking channels.

periodic fluctuations in loaning initiative are greatly reduced, if not completely eliminated.

In the past, undue stimulation of production has been a baffling problem to all branches of the livestock industry. Producers have been perplexed by the recurrent appearance of a volume of production so much in excess of the current needs as to make profitable operations impossible. As was pointed out above, lending agencies, well after the time had arrived when expansion was presaging a runaway market, have continued to extend credit in a lavish manner, and later, through restrictive financial policy, have held back credit accommodations at a time when it was most needed and most justified by fundamental conditions. This has been due to inadequate knowledge or faulty interpretation of current conditions.

Adequate analysis of fundamental livestock trends involves, on the one hand, a study of production conditions in the various divisions of the industry. The number and the condition of breeding herds, general conditions on the ranges, and the amount and price of feed available in the feeding areas must all be taken into consideration in gauging the status of the industry at any given time. On the other hand, it involves a study of the trend of livestock prices as shown in the quotations of the central market. By means of comparable data running over a period of years it is possible to forecast with some degree of accuracy the situation that

is likely to obtain for some months ahead. Regularization of prices and production is a primary responsibility of the institutions which furnish funds to the livestock industry.

One of the most striking characteristics of a boom period in the industry is the entrance into it of many speculative operators. Speculators invade all three of the major divisions of the livestock industry when prices are rising, with a view to taking advantage of a temporary situation; and they leave the industry as soon as the first sign of trouble comes. Such operators are even more dependent upon borrowed money than the regular producers who stay by the business year after year. If the lending institutions will draw a sharp distinction between regular producers and feeders and the production gamblers who, like crows around carrion, flock in to strip the industry and then rush off to other fields, the extreme fluctuation in the volume of production will be greatly curtailed.

In periods of rising prices loans should be scrutinized more carefully and the percentage of loans to values should be reduced. This principle has in the past never been sufficiently recognized. During the war and immediately thereafter loan companies paid little attention to the fact that valuations on which loans were based had risen beyond all former records. Indeed, instead of reducing the percentage of the cost price which would be loaned, with a view to protecting itself against a possible sharp decline

in prices, the percentages were actually increased until the advances often reached 100 per cent of the purchase price. This was done apparently on the theory that what goes up does not come down but goes ever higher.

If credit institutions will extend loans on the basis of average prices rather than maximum prices and then reduce the percentage that will be loaned as prices rise, they will keep out of the industry most of the speculative operators. Such operators, in the nature of the case, expect to borrow practically the full value of the herd or flock and, if increasing margins are required as prices rise, few of them will be able to stay in the business during the latter part of the upward swing of a price cycle.

The purchasers of paper can exercise a particularly important influence in periods of rapid price advance. The very fact that city correspondent banks and Federal Intermediate Credit Banks are not so closely connected with the borrowers enables them to have a better balanced view of the situation. At the same time they should be better equipped to study fundamental price and credit conditions than the scattered isolated banks and livestock loan companies. In the interest of maintaining a strong credit structure for the nation as a whole, the larger city banks, and particularly the Intermediate Credit Banks, have a definite responsibility for preventing the periodic expansion of the industry beyond what general conditions warrant.

The need of sustaining the industry in periods of depression is quite as important as restraining the industry in periods of boom. If the speculative excesses which have previously marked the expansion periods are eliminated, depressions will henceforth be less severe than has been the case in the past. There will remain, however, periods of good and bad times in the industry, and provision must therefore be made for sustaining the industry when it is backpedaling. This requires some important changes in credit organization.

The average size of the banks in livestock areas should be increased. One of the important reasons for the breakdown of credit accommodations in the Western states was the large number of small undercapitalized banks. When financial stringency occurs, it is this class of banks which is hit first and hit hardest. All authorities are agreed that a smaller number of larger banks is required if the livestock industry is to be carried through periods of depression. While the events of the past five years have tended to decrease materially the number of small banks, the number is still too large in the region west of the Mississippi.

City banks must help to carry the industry through periods of depression. As the cattle loan business has developed, a very considerable percentage of the funds required has come, as we have seen, from outside purchasers of cattle paper. One writer has estimated that 40 per cent of the money invested

in the sheep business is owned and controlled by people who are not interested in the sheep industry as such, but who are concerned merely with finding safe investments. Such funds are withdrawn from the industry at the first sign of difficulty. As William Sharp puts it, "Money, once it enters into the borrowed state, suffers a temporary loss of identity, but it never loses its sensitive homing instinct." [5]

In commenting further on the attitude of city institutions which utilized surplus funds in buying livestock paper the same writer remarks, "They know little or nothing about the inside of the business; their dollars are blind dollars, trusting their safety only to the presence of the other 60 per cent over which they have a sort of 'women and children first' privilege. It is this 40 per cent which needs to be released from the bondage of blindness and ignorance. This 40 per cent dictates the welfare of the other 60 per cent. This minority of capital controls the progress of the sheep business. When it is withdrawn, the industry goes flat." [6]

This analysis would apply equally to the cattle industry. The banks of the financial centers have regarded livestock paper as a secondary reserve. Since the banks are not directly connected with the ultimate borrowers they feel no personal responsibility such as they have with reference to their own city clients. It has been assumed that livestock

[5] *National Wool Grower,* April, 1925, p. 39.
[6] *Ibid.*

paper will as a matter of course be paid at maturity. Like commercial paper purchased through brokers, there has been no obligation on the part of the bank to renew it; on the contrary, the obligation has been on the borrower, or the livestock loan company, to repay the loan at maturity even if bankruptcy impends. This statement is not intended as a criticism against city banking institutions, for there has been no conscious intent to jeopardize the livestock industry. The purchasers of livestock paper have merely been seeking a safe outlet for their excess funds. Since the bank's first duty is to its depositors, "safety first" has naturally been the motto in connection with livestock paper.

When conditions are satisfactory in the livestock industry livestock paper is of course readily paid at maturity. If the borrower has not already liquidated his stock he can pay off the maturing notes with the proceeds of other loans which will be negotiated by the loan company. Trouble comes when there is a general crisis in the industry and a large number of banks simultaneously require the payment of livestock paper at a time when new loans cannot be procured. Since many cattle loan companies rediscount their paper in a relatively restricted territory, even a purely local financial disturbance may completely upset the market for the paper of that particular company.

The lesson has now been pretty well learned that in periods of deflation bank loans generally cannot

be liquidated. Distressed customers must be carried along, tided over the emergency, if wholesale bankruptcies are to be avoided and if the disastrous consequences of a general business depression are to be minimized. It is precisely because this is the case that emergency lending institutions such as the Federal Reserve Banks are required. A concrete illustration of the inability of even a great staple industry to liquidate its obligations may be taken from the livestock and packing industries.

The large packing houses have usually borrowed large sums through commercial paper brokers, the paper being purchased by the banks of the financial centers. Such loans constituted a preferred asset since there was no obligation on the part of the purchaser of the paper to grant a renewal. In ordinary times the packer could readily pay at maturity or even before maturity without liquidating his obligations in general for the reason that he could borrow additional amounts through his broker as old notes matured. But during the crisis of 1907, when Chicago banks were hard pressed for cash, a number of banks simultaneously pressed Armour and Company for the liquidation of their commercial paper. Mr. Armour replied:

"What! I, who am liquidating the country and taking the cattle, sheep, and hogs that are being daily sent to market, to liquidate bank loans! I, who am pushing pork and beef over to Europe for money, must curtail! Gentlemen, I am the liquidator! What would be the con-

dition of your bank loans if I turned these cattle back to the farm?" [7]

Apropos of this statement, one writer remarks that "until the world stops eating and drinking, or wearing clothes, or consuming fuel, there is a new note right behind the one liquidated by the consumable commodities. Across the continent there is a line of sheep, and a commercial note on the tail of each in endless procession." [8] A general curtailment of credit to the packing industry would, as Mr. Armour pointed out, stop the flow of livestock from the farms to the markets of the world. It is just as true that a curtailment of loans to the producers of livestock would disrupt the entire industry. Country banks and livestock loan companies must not in times of crisis summarily restrict credit and insist upon the liquidation of loans. This they will have to do, however, unless city correspondent banks or Federal Intermediate Credit Banks will assume a definite responsibility for helping to carry the industry through periods of stress.

What we are contending is merely that the livestock industry is as important to the nation as any other industry and that in consequence it must be carried along in times of depression just as other industries are carried along. However much local lending agencies may be improved, in the last analy-

[7] Barron, C. W., *The Federal Reserve Act*, pp. 70, 71.
[8] *Ibid.*

sis the requirements in a time of crisis cannot be fully met by the local banks or livestock loan companies. The financial centers and the Federal Reserve system must be the final shock absorbers.

CHAPTER XII

REGULATION AND ARTICULATION

The recommendations thus far advanced for the stabilization of livestock finance contemplate measures of reform which are merely internal in scope and voluntary in character. The question may now be raised whether any of these proposals would amount to more than a gesture unless some outside and centralized authority were given supervisory or regulatory powers throughout the livestock loan field. Akin to this is a second question, namely, just how is livestock financing to be tied into our financial structure as a whole?

I. EXTERNAL SUPERVISION

Should any centralized action be undertaken, it might have one or more of three purposes: (a) collecting information, (b) furnishing advisory service, (c) actual control of rates, practices, or the general scope and character of operations. It is certain that we are not ready to go to the full extent of such a regulatory program at the present time, if ever. On the other hand, even the first of these three regulatory functions is of such great and fundamental

importance that even the internal reforms suggested in Chapter XI must largely wait upon it. The industry cannot effectively regulate its own operations unless it has full and accurate knowledge; and the gathering of the necessary information practically demands some public reporting system.

To be sure, it has sometimes been suggested that the direct and effective way of meeting the whole problem at one stroke would be to establish governmental control under federal charter. Aside, however, from certain obvious objections to such a proposal, the great variety of ways in which the livestock industry is financed makes it a practical impossibility. Loans for livestock purposes are made by national banks, by state banks, by livestock commission concerns in the market centers, by livestock loan companies, to some extent by co-operative associations, and, since 1923, by state agricultural credit corporations. The state banks cannot be compelled to take out federal charters, nor can the livestock loan companies be compelled to become part of a national banking system. They are incorporated under the laws of the various states, and the most that could be done would be to subject them to the control of state banking departments. This development, however, would be entirely reasonable and highly desirable.

But whether or not any system of actually regulating the operations of these companies be developed, it would be an incalculable gain if all livestock

lending agencies were to make systematic reports to some central agency, showing the amount and character of their loan operations. The lender of funds, whether it be a city bank, a Federal Intermediate Credit institution, a livestock commission house, a livestock loan company, or a state or national bank, must for its own adequate protection know not merely the momentary financial status of the particular borrower but also the general credit situation in the industry. Until such knowledge is available, we shall continue to have periodic crises and catastrophes in the livestock industry. If the self-interest of livestock loan agencies in having this information is sufficiently emphasized, there should be no insuperable difficulty in procuring the effective co-operation of a majority of such agencies in the assembling of the necessary data. Even though not complete, it would give a record in figures which for purposes of comparison and the examination of trends would be invaluable.

Perhaps the best plan for assembling this information would be to have the national banks report to the federal Comptroller of the Currency; the state banks to the state banking departments; and the agricultural credit corporations, the livestock loan companies, and commission concerns, to the Federal Intermediate Credit Banks. The state banking departments, the Comptroller of the Currency, and the Federal Intermediate Credit Banks should in turn send their reports to the Federal

Farm Loan Board,[1] by which all of the figures could be presented in one combined report.[2]

The reports should furnish the following main classes of information:

(1) Amount of loans to livestock producers outstanding, classified as follows:
   (a) Amount purchased from other banks or institutions and amount loaned to individual borrowers.
   (b) Amount loaned on cattle, on sheep, on other animals.
   (c) Amount retired since last report; amount of new loans made.
   (d) Geographical distribution.
   (e) If possible, amount loaned on breeding herds, on stockers, and on feeders.
(2) The volume of rediscounts outstanding. (This would be necessary for the intermediate financial

[1] This suggestion is made because of the fact that the Intermediate Credit system is under the administrative control of the Farm Loan Board. This Board has not as yet developed a statistical and analytical service comparable with that of the Federal Reserve Board. While it may in time do so, it might prove better to consolidate this analytical and research work under the one organization already in the field, the Division of Research and Statistics of the Federal Reserve Board. Such a procedure would be natural, since much of the work of livestock financing is done through commercial banking institutions directly or indirectly, and partakes more of the character of commercial banking than of land mortgage financing.

[2] If reports are to be of service they should be made frequently, perhaps quarterly. In view of the fact that the reports to the Comptroller of the Currency are made four times a year, the best plan would be to have all institutions engaged in livestock financing make their reports four times a year, the national banks simply adding this item to their regular reports. Since reports to the Comptroller are not made on fixed dates, the data derived from other sources might vary as much as two or three weeks from the date of the national bank figures. However, such variations would not be a very serious matter if efforts were made to synchronize the reports as closely as possible.

agencies only—not for the final purchasers of paper.)

Items 1a and 2 of course cover the same general body of information but, being reported in the one case by the borrowing and in the other by the lending institution, would serve as a valuable check on each other. If some paper were sold to banks outside the country or through non-banking channels, some discrepancy in the figures would inevitably result. However, the information would be reasonably accurate and quite sufficient for purposes of comparison.

The necessity of separating sheep from cattle loans should be emphasized. At the present time the Federal Intermediate Credit Banks merely show the rediscounts made for livestock loan companies, with no differentiation between loans on sheep and on cattle. In the case of loans discounted for the agricultural credit corporations, livestock loans are not classified separately from the general agricultural loans made by these companies. As a result, it is impossible to tell at present the actual amount of livestock paper rediscounted for agricultural credit corporations, and still less to distinguish between cattle and sheep loans. Since conditions in the cattle and sheep industries often differ at any given time, it is of the first necessity that these loans be differentiated.[3]

[3] It has been contended by some that it is impossible to identify livestock loans with entire accuracy for the reason that many

In order to insure uniformity and completeness in the reports and to make certain that all livestock financing companies shall be brought under the same system, a federal statute would be required. This could be enacted as an amendment to the Agricultural Credits Act of 1923. The effect would be to make the Federal Farm Loan Board a clearing house of all this information so vital to the safe conduct of this branch of our agriculture. If the Board should develop a department of research similar to that of the Federal Reserve Board and issue a periodic bulletin in which penetrating analyses were made of the facts reported to the Intermediate Credit Banks and of such other pertinent information as it might gather, it might soon become an interpretive service of great value.[4] As to the third type of regulatory function, even now the various rulings as to practices of the Intermediate Credit

loans which do not appear as livestock loans are nevertheless of indirect aid to the livestock business. For example, it might be argued that loans for the purchase of feed are properly chargeable to livestock, and even that loans for the purpose of building fences, erecting feeding sheds, and so forth are indirectly livestock loans. For the purpose in hand, all that is required is a record of the loans which can be definitely allocated to the specific collateral.

[4] Such statistics treated analytically would be of great service to other public and semi-public agencies which are directly concerned in helping agriculture make wise decisions for the direction and readjustment of its future operations. Such agencies include the federal and state departments of agriculture, market bureaus, agricultural colleges, experiment stations, county agents, farm bureaus, and voluntary agricultural associations. Without venturing on the dangerous waters of commercial forecasting, such a reporting agency could furnish a much more solid factual basis than is now available to those whose fortunes are tied up with the livestock industry.

Banks and Federal Reserve Banks and the setting of maximum margins and interest rates tend to equalize and to some extent regulate the financing of the whole industry.

II. LINKING LIVESTOCK FINANCE WITH THE FINANCIAL SYSTEM AS A WHOLE

It has been pointed out repeatedly as our discussion has progressed that a considerable amount of livestock financing is taken care of by the ordinary commercial bank and that even the commission firm and specialized livestock loan company rely upon commercial banks and ultimately upon the Federal Reserve Banks as sources of funds. We have taken the position that these interrelations will be continued and may be made more effective and satisfactory than they are now. This perfecting of the organization of livestock finance as an integral part of our whole credit system must now be made with particular reference to the potentialities of the new Intermediate Credit institutions.

The Federal Intermediate Credit Banks should play an increasingly important rôle in connection with livestock financing. A considerable part of livestock financing, namely, that having to do with stock and breeding loans, is of the nature of investment credit and should be handled on the amortization plan discussed in Chapter XI. The period of liquidation is characteristically much longer than three or six months, and consequently its financing

should be made a function of the Federal Intermediate Credit system rather than of the commercial banking system. The financing of feeder loans both in the range states and in the Corn Belt will of course always be to a considerable extent taken care of by local banks and livestock loan companies which sell their paper to city banks. But as the Federal Intermediate Credit system develops its proper functions it should, through its rediscounting operations, more and more take the place of correspondent banks, at least so far as breeding and stock loans are concerned.

This does not mean that the livestock loan company should be displaced by the agricultural credit corporation, though such an idea was in the minds of those who framed the Capper-MacFadden bill, which became the second part of the Agricultural Credits Act of 1923.[5] Basing their proposals on experience with the War Finance Corporation, they planned the National Agricultural Credit Corporations (see p. 240) to take care of all the needs of the livestock industry, thus superseding the independent livestock loan companies. On the other hand we find the view entertained by many people that the independent cattle loan company should continue its business along the same lines as before the war, selling its paper wherever it can do so to the best advantage, but having better outlets avail-

[5] Compare Benner, *The Federal Intermediate Credit System*, pp. 114 ff.

able in times of difficulty owing to the provision for National Agricultural Credit (rediscount) Corporations and the Intermediate Credit Banks.

Thus far there has not been any considerable development of National Agricultural Credit Corporations of either the large or the small type. This is doubtless owing to the stricter requirements for such institutions as compared with livestock loan companies, and probably indicates that instead of the latter being superseded our line of development will show a strengthening of their practices and their incorporation more fully into our financial organization as a whole. If they are to be continued and strengthened in this manner, they should welcome such moves as those suggested above to bring them under the control of state banking departments and to require systematic reports on their business operations to the Federal Farm Loan Board.

If this be done, it is by no means clear that it would be necessary to follow the practice now adopted by the Federal Intermediate Credit Banks of requiring a livestock loan company to rediscount all of its paper with the Federal Intermediate Credit Bank if it is to discount any of it there. This practice of the Federal Farm Loan Board, debarring a loan company from simultaneously selling some of its paper to correspondent banks and rediscounting another part with the Federal Intermediate Credit Bank, is doubtless in part to be explained as an effort to prevent an adverse selection of paper in

its hands. There was some ground for fear in the disorganized period 1923-24, when the Federal Intermediate Credit Banks were just getting started, lest the least desirable paper of the livestock loan companies would be unloaded on them while the city correspondent banks would get the pick of the offerings. It does not seem as a long-run matter that there would be any danger in this direction, and the enforcement of the rule tends to defeat the very purpose for which the banks were established; that is, it has deterred many livestock loan companies from using the Federal Intermediate Credit system at all.

This change in the regulations would bring the operation of the Federal Intermediate Credit system more nearly into accord with the operations of the Federal Reserve system. It is the theory that Federal Reserve Banks will rediscount the paper of commercial banks whenever and to whatever extent the commercial bank requires accommodation, so long, of course, as the paper is eligible and there is no necessity for credit restriction in the interest of general financial stability. It would seem to be a wise policy for the Intermediate Credit Banks to give the fullest service that they can, thereby not alone building up the whole organization of livestock financing, but at the same time developing a larger earning power for themselves such as would enlarge their possibilities of service in times of special need.

If the present rule were so modified as to permit the livestock loan company to offer for rediscount at any time some portion of its paper, it would follow that each Federal Intermediate Credit Bank would be able to keep closely in touch with the financial condition and the loan operations of all the livestock loan companies of its district and not merely such companies as have decided to discount all of their paper at the Intermediate Credit Bank. This would help to solve the administrative problem of the Federal Intermediate Credit Banks without imposing any undue burden upon them. In fact, the broader acquaintance with the conditions of the industry which would result from this requirement would make the management of these banks much more efficient than would otherwise be the case. At the same time, the more or less continuous scrutiny which the Federal Intermediate Credit Banks would thus be exercising over the operations of livestock loan companies would tend steadily to improve the financial management of such companies.

The Federal Intermediate Credit Banks can and should articulate with the Federal Reserve system. The Intermediate Credit Banks, it must be always borne in mind, are not ultimate reservoirs of credit. They are themselves intermediaries between agricultural financing institutions and the purchasers of their debentures or other obligations. Through the issue of these debentures secured by livestock or

other agricultural paper, Federal Intermediate Credit Banks are enabled in times of need to tap the resources of the financial centers. Their debentures may be sold either to individuals or to commercial banks in the financial markets or they may even be sold to the Federal Reserve Banks direct. Thus there is established a much broader market for agricultural paper than was the case when the particular bank or livestock company was dependent primarily upon at best a few city banks which looked upon such paper as a convenient investment but assumed little or no responsibility for carrying it over periods of stress. Hereafter in times of emergency, when the ordinary lending agencies are unable to meet the pressing needs of the livestock producer, additional resources will be accessible through connections that have been established with the Intermediate Credit system and the Federal Reserve system.

This of course does not mean that livestock borrowers are assured of whatever extension of credit they might ask for at any time. But it does mean that under a sound but broad-minded administration the Intermediate Credit system should in the future serve in two distinct ways to stabilize the financing of the livestock industry.

In the first place, it will be available to take over livestock paper which commercial banks find it necessary to dispose of at times when the demands of their own regular customers prove to be as much

as they are able to carry. At such times they naturally feel an obligation to take care of customers' paper in preference to purchased paper. While this is only natural and proper, it is likely to prove extremely embarrassing to livestock financing agencies to have their market outlet contracted at such a time. But with the Intermediate Credit system in operation, initial lending agencies have an alternative channel to the national reservoir of funds as readily available to them as to any other industry through the ultimate equalizing effect of the Federal Reserve system.

In the second place, the Intermediate Credit system should serve to stabilize the livestock industry in times of general business stringency. The operation of the regular credit machinery at such times tends to put safety ahead of service and to contract credit to a point where liquidation is forced, thus bringing about the very evils it is desired to avoid. At such times it seems a proper concern of public policy for a government financing agency to maintain so far as is possible the lines of credit extension to which the industry is adjusted until such time as orderly readjustment can be effected. In such a process, the assumption of a certain amount of risk is entirely proper so long as it can be met out of the accumulated earnings of the system. Service and the stabilization of our economic organization as a whole rather than the piling up of profits is the prime objective of such a government financing

agency, and if directed by officials of broad constructive vision as well as sound training in finance it should develop into an institution of distinct value for the stabilization of the agricultural branch of the nation's business.

In conclusion, it is perhaps well to point out that there is no panacea for all the problems confronting the livestock industry. The business itself is not only of vast extent, but it is essentially decentralized in character and thus largely unorganized. Moreover, the market for livestock is affected by world-wide conditions of demand and supply as well as by local climatic and other variable conditions. Mere improvements in livestock management and in livestock financing methods can thus never place the industry upon an entirely stable basis. Nevertheless a high degree of stability and soundness—compared with that which has obtained in the past—can be brought to the industry through whole-hearted co-operation of producers and credit agencies along the lines which have been indicated in this analysis. The application of better business methods, the careful study by both producers and financiers of production and price tendencies, and the adjustment of the flow of credit in accordance with the changing conditions in the industry can open up a new era for the livestock industry.

APPENDICES

APPENDIX A

SPECIMEN FORMS OF DOCUMENTS USED IN LIVESTOCK FINANCING

CHATTEL MORTGAGE

KNOW ALL MEN BY THESE PRESENTS, That...
.....
.....
....., of the County of.....
State of.....hereinafter called grantor
, for and in consideration of the sum of.....
.....
.....Dollars ($.....).
to him or them paid by.....
.....
of the County of....., State of.
....., grantee, the receipt whereof is hereby acknowledged, has or have sold, as signed, and transferred, and by these presents does or do sell, assign and transfer unto grantee, his, their, or its successors and assigns, the following described property, to-wit:

All, Cattle and/or Sheep covered by this mortgage are now in my possession, located on Secs....., Twp....., Range....., ...County,.....
.....State. .....miles (dir.).....from
.....town on.....
farm.

Said cattle or sheep may have other marks or brands upon them than those mentioned above, but those given are the holding brands or marks, and carry the title to the property. The above enumeration and description is intended to cover and include all the cattle or sheep now owned by the grantor wherever found, and all cattle or sheep hereafter acquired by natural increase, additions, accretions, or otherwise, by the grantor, together with the lease, lease privileges, grass, feed and water used or that may be used in maintaining said stock. Said property is exclusively owned by and is in the possession of the grantor, is free of encumbrance and in perfect health; and the grantor will, and his (or their) heirs, executors, administrators or successors shall, the right and title to said property, to the grantee, his, their or its successors and assigns, forever warrant and defend. It is provided, however, that the property shall remain in the possession of the grantor, and be fed by and at the grantor's expense, during the existence of this mortgage, subject to the conditions herein contained, but said property, or any part thereof, shall not be removed from the place where now located, nor be otherwise disposed of or encumbered, without the written permission of the grantee or his, their or its assigns.

This conveyance is intended as a mortgage for the purpose of securing the grantee in the payment of a certain indebtedness, owing to grantee in the sum of .....Dollars, evidenced by ..... promissory notes executed by grantor, payable to the order of the LIVE STOCK EXCHANGE, INC., at ..... and further described as follows:

....Note....for $..... dated....., payable.....
....Note....for $..... dated....., payable.....
....Note....for $..... dated....., payable.....
....Note....for $..... dated....., payable.....
....Note....for $..... dated....., payable.....

together with interest thereon at the rate of .... per cent per annum from .....

including the legally authorized amount for attorney's fees it placed in the hands of attorneys for collection, or if collected by suit, or through the probate court; and also for the purpose of securing any other indebtedness now or hereafter owing by grantor to grantee or his, their or its assigns, whether such liability is joint or several or is owing by me or us as principal, surety, endorser, or guarantor, and including any money which may be advanced for the maintenance, preservation, protection, handling, marketing or shipping of the above-described stock (but this shall not be construed as obligating grantee or assigns to make any such further advancement), together with interest thereon from date advanced at the highest legal rate.

Upon the payment of said note or notes, and other now or hereafter existing debts, as mentioned above, if any, with interest and attorney's fees thereon accrued, and any such future advances, together with the expenses incurred in executing the provisions of this mortgage, being well and truly made, then this instrument is to become void; but should any of the above agreements or conditions be broken or violated, or should any of the above representations or statements by grantor be ascertained to be untrue, or if the property or security, or the value thereof, be at any time impaired by neglect, depreciation in value, or other cause, or upon failure to pay said note or notes or any of them, or other indebtedness, if any at maturity, then, in any such event, the whole of the above-mentioned indebtedness may become due and payable instanter, at the option of the grantee, or his, their or its assigns, without notice; or in the event said property should at any time be seized or be about to be seized, sold, taken or removed by any other party under any claim whatever, or by grantor without the written consent of grantee, or his, their or its assigns, whether said indebtedness be due or not, then the grantee, or his, their or its assigns, or agents, is then or at any time thereafter, authorized and empowered to enter upon the grantor's premises, or elsewhere, to seize and take into his or their possession all or any part of said property wherever found, and to sell the same at either public or private sale, as may seem to grantee, his, their or its assigns, or agents, to be for the best interest of the parties hereto, or may in any such event sell said property in any manner herein provided without seizure or taking possession of the same; and in the event of any such seizure or sales, with or without legal process, grantor and his assigns hereby expressly waive and relinquish unto grantee, his, their, or its assigns, or agents, any and all damages or claims for damages occasioned thereby. Any sale hereunder shall be for cash, and at such time and place as the grantee, his, their, or its agents or assigns, shall elect. If a public sale is made, it shall be only after giving notice of the time and place of same by posting for at least five days before sale a written or printed notice thereof at the Court House door of the County in which the property is located (but if located in more than one County, then in either or any such County), and by posting such other notices as may be required by law. Such sale may be adjourned from time to time, as the person conducting same may deem expedient. If a private sale is made, no notice of any kind need be given. In the event of such sale, public or private, the grantee, his, their, or its assigns or agents, may buy the property, being the highest bidder therefor, and may in the name of the grantor and for him or them, make and deliver to the purchaser or purchasers, a formal bill of sale for the same (but no bill of sale shall be necessary), and shall receive and receipt for the purchase money, and apply the same to the payment of said note or notes, interest thereon, the commis-

sion, and any future advances as aforesaid, attorneys' fees and expenses of said sale, and to any other indebtedness of the grantor to the grantee, or his, their, or its assigns, whether contracted before or after the date hereof, and whether owing individually or jointly, primarily or secondarily, and whether then due or not, and hold the remainder, if any, subject to the order of the grantor; and if the proceeds of the sale shall not be sufficient to pay the total indebtedness the grantor will pay any such deficit on demand; and any sale made and bill of sale given hereunder shall be deemed valid, and be supported by the presumption that all the prerequisites to a valid sale were complied with. In order to resist any claim to or encumbrance on, or to get possession from any person who may seize or have possession of said property, and otherwise protect its rights therein, the grantee, his, their, or its assigns or agents are fully authorized to institute and prosecute any suit or other legal proceedings, in his, their, or its own name, or in the name of the grantor, and pay all legal and other necessary expenses or costs, including attorneys' fees, out of the proceeds of said property when sold.

This mortgage shall remain in force until all of said indebtedness is paid, whether the same be evidenced by the original note, or notes, or renewals for the whole or any part of said amounts, or be on open account, and any other mortgage as additional security shall be supplemental to this, until this is formally released.

The grantor hereby acknowledges receipt and delivery to him at the time of the execution and delivery hereof, of a true, correct, full and complete copy of said original signed instrument, with the signatures of the witnesses and the certificate of acknowledgment thereto as shown on said copy.

Witness.....hand....this .....
.....day of....., A. D. 19....
Signed, sealed and delivered in the presence of:

.....
.....
.....
.....

.....(SEAL)
.....(SEAL)
.....(SEAL)
.....(SEAL)

ACKNOWLEDGEMENT

The State of.....
. . ..*County*
ss:

BEFORE ME, the undersigned authority, a Notary Public in and for.....
County,.....*on this day personally appeared*.....*known to me to be the person*...*whose name*.....*subscribed to the foregoing instrument, and acknowledged to me that*.....*executed same for the purposes and consideration therein expressed, and as*.....*free and voluntary act and deed.*

GIVEN under my hand and seal of office, this..
.....*day of*.....*A. D. 19*.....
(SEAL)
Notary Public.....
My term expires.....
County..... *State*.....

CERTIFICATE OF TRUE COPY

The State of.....
.....*County*
ss:

I, the undersigned County.....*hereby certify that I have this day at*.....*o'clock*....*M., filed in my office a true copy of this mortgage, duly certified as required by law. Registered in Volume*....., *Page* ....., *and numbered*.....

WITNESS my hand and official seal at.....
.....*this*.....*day*....., *A. D. 19*.....
(SEAL)
.....
County....., *State*.....
By.....*Deputy.*

FINANCIAL STATEMENT

....
Name Post Office County State

The following statement of facts representing the actual financial condition of the undersigned is made to establish credit with the .....that will warrant and induce said ..... to loan money now or hereafter to or upon the name of the undersigned, which statement you can consider as continuing to be full and accurate, unless notice in writing of change is given by me to you.

ASSETS			LIABILITIES		
Cash in .....Bank			Money borrowed from banks on unsecured note: (Itemize)		
Notes due me (Good).....			.....		
All other personal property (including machinery and equipment)			Bank Town		
.....			.....		
.....			Bank Town		
Bonds			.....		
Mortgages owing me			Bank Town		
....Steers @ $.....per head			Mortgages on real estate: (Give in same order as opposite)		
....Steers @ $.....per head					
....Steers @ $.....per head					
....Cows and Heifers @ $.....per head			Mortgagee Due		
....Calves @ $.....per head			1.		
....Horses @ $.....per head			2.		
....Sheep @ $.....per head					
....Hogs @ $.....per head			3.		

Feed on hand as follows: (Itemize)				4.			
Oats				Money Borrowed secured by Chattel Mortgage (List)			
Corn							
Wheat							
Hay							
Other feed							
				Accounts Payable			
Real Estate:							
Acres Sec. Twp. Range Co.				Other debts (Itemize)			
1.							
2.							
3.							
4.							
				Total Liabilities			
				Net Worth			
Total Assets				Total			

Liability as endorser $..... Have you ever failed or compromised with your creditors?

.....Approximate amount. Fire Insurance $.....Are there any judgments against you?

Do you have any partners in business?.....

Witness .....

Dated ..... Signed .....

PROMISSORY NOTE

This note secured by .....

No..... City..... $.....

.....after date, for value received.....promise to pay to the order of LIVE STOCK EXCHANGE at.....

the sum of.....Dollars

with interest thereon at the rate of.....per cent per annum from.....and delinquent interest and principal after maturity shall bear interest at eight per cent per annum. If this note is not paid at maturity, and is placed in the hands of an attorney for collection, then the legally authorized amount shall be added to the principal for collection fees. Sureties, guarantors and endorsers severally waive presentment for payment, notice of non-payment, protest and notice of protest and consent that the time of payment may be extended without notice thereof, and each of them hereby personally charge their own separate estate with the payment of this note and the debt evidenced thereby. If this is one of a series of notes given to secure an indebtedness, then a default in the payment of any of the notes or interest thereon shall render this note due and payable at the option of the holder. This note is secured by a chattel mortgage duly filed

or recorded in..... County.....

P. O. Address..... ....

Due ....

DRAFT FORM

No. .....

PRODUCERS EXCHANGE BANK

Dallas, Texas, April 20, 1925

Enclosures:
Bill of sale 300 steers and release of mortgage.

At sight

Pay to order of Security Cattle Loan Co. $10,000.00
Ten thousand and no /100 ..... Dollars
Value received and charge account of

John Doe,
Vice President.

Chicago, Illinois

WARRANTY OF TITLE FORM

STATE OF TEXAS, JONES COUNTY.

KNOW ALL MEN BY THESE PRESENTS: That we, the Security Cattle Loan Company of the State of Missouri, County of Jackson, in consideration of the sum of Ten Thousand Dollars ($10,000), to us paid by the First National Bank of Chicago, Illinois, the receipt of which is hereby acknowledged, have bargained and sold, and by these presents do bargain and sell unto the First National Bank of Chicago the following described cattle, hereby binding ourselves to warrant and defend the title to said cattle against any person claiming, or to claim the same, or either of them.

300 head dehorned Hereford two year old steers, branded X on left hip.

WITNESS my hand this 19th day of April, 1925.

SECURITY CATTLE LOAN COMPANY
By John Doe,
President

Witness: James Brown

RELEASE OF CHATTEL MORTGAGE FORM

SECURITY CATTLE LOAN COMPANY

Kansas City, Mo.

April 19, 1925.

To the County Clerk,

Jones County, Texas.

Release from record 300 head of two year old Hereford steers, branded X on the left hip, now ranging on the John Brown ranch in Jones County, Texas.

This is a partial release only and does not affect our general chattel mortgage on 1,000 two year old Hereford steers, of which the 300 head above released are a part.

The chattel mortgage referred to bears the date of January 2, 1925, and is due and payable October 2, 1925.

Very truly yours,

SECURITY CATTLE LOAN COMPANY

By John Doe,
President

STATEMENT OF NO ENCUMBRANCE

OFFICE OF COUNTY CLERK

Jones County, Texas

April 15, 1925.

To Whom It May Concern:—

I have this date examined the chattel mortgage record and find no unreleased mortgages of record against any cattle owned and grazing on the ranch of John Brown located in this County.

Very truly yours,
John Smith,
County Clerk.

APPENDIX B

A SPECIAL MESSAGE FROM THE UNITED STATES FOOD ADMINISTRATION *

In all ages cattle have represented wealth; and even with modern civilization and complex warfare the same primitive human tendencies are still evident. It is striking to note that in measuring the resources and comparative stamina of the nations at war the amount of livestock remaining in each country has been a prime consideration. And just as ancient tribes drove off, as booty, the cattle in territory invaded, so the Germans have repeated this practice in Belgium, Northern France, Servia, Armenia, and Russia.

Land without cattle rapidly loses its value and its ability to support large populations. The application of this agricultural principle is now an important factor in the food situation. This year it has been very difficult for the populations in Europe to forecast with accuracy the yield of their cereal crops. Even though the early growth of grain may be promising, the development of kernels and heads does not take place until shortly before harvest, and depends to a large extent on fertilization. In the Allied countries the manure from livestock has supplied most of the fertility, which is now diminishing to an alarming degree, with scant hope of improvement until after the war.

* Released in January, 1918.

The Allies have found it impossible adequately to maintain their herds in the face of a fodder and feed shortage, added to a heavy demand for meat. To an unusually large extent the pastures which formerly supported herds and flocks have been plowed up and are now growing cereal grains and vegetables.

MEAT RATIONS IN ALLIED COUNTRIES

The probable demand for meat after the war may be judged from the present greatly reduced meat ration by the Allies as compared with their normal per capita consumption. Before the war, the per capita consumption of meat in the United Kingdom was 120 pounds; in France, 80 pounds; and in Italy, 47 pounds. Recently the United Kingdom and France were put on a ration of one pound per week, or 52 pounds per capita per year. It will be observed that in the United Kingdom the entire population is receiving less than one-half as much meat as they were accustomed to before the war. An additional outlet for beef grown in the United States is the American army which has adopted one pound of beef a day as the meat ration. On that basis, it requires 730,000 average beef cattle to supply the yearly requirements of a million men. This is only slightly less than a month's slaughter under governmental supervision, as market receipts have recently been running. In other words, an army of 5,000,000 men would consume about one-half our yearly output of inspected beef.

GERMANS AS CATTLE "RUSTLERS"

The Central Powers were considerably better prepared for the war than the Allies. Although in July, 1914, the

Allies possessed a larger number of meat animals than the enemy countries, the latter had about 42 per cent more per capita, and this advantage amounted to 33 meat animals of all classes per 100 population.

Furthermore, Germany has acquired a large number of livestock by conquest and has consequently maintained her home supply of livestock to a larger extent than would otherwise have been possible. Belgium, Serbia, and Roumania have suffered a practical exhaustion of animals as a result of German invasion. *In total amount of livestock, the herds and flocks of the Allies have decreased more than 45,000,000 head,* while German herds have undergone a loss of only about 18,000,000 head—slightly more than a third as many. *Total European losses, including Austria, Turkey, and Russia, are believed to exceed 100,000,000 head of livestock.* The aggregate number of cattle, sheep and hogs now in the United States is about 187,000,000, which makes a striking comparison with the European depletion of 100,000,000 animals. Thus it appears that Europe has already lost over one-half as many meat animals as are in the United States to-day.

HOW REFRIGERATION AFFECTS MEAT INDUSTRY

In view of these requirements of both the American army and our Allied comrades in arms, the maintenance of the cattle industry in the United States is an essential contribution toward our success in the war.

An important consideration—which will be equally vital after the war—is the general use of refrigeration in transporting meat. The introduction of modern re-

frigeration methods has encouraged the breeding of better animals for meat purposes. Without methods for artificial cooling, meat to be exported would have to be shipped either on the hoof, or, if slaughtered, be salted or dried. Exporting live cattle has not been successful commercially, and preservation of meat by salting or drying makes it relatively tough and unpalatable. Thus in the absence of refrigeration there is slight incentive to produce a fine quality of meat. Chilled meat has a more delicate flavor than solidly frozen meat; but both methods of refrigeration maintain the original quality to a satisfactory extent, thus encouraging the breeding of good quality stock.

The largest livestock reservoirs of the world are Argentina, New Zealand, Australia, and the United States. Obviously, with the limited amount of shipping available, and especially limited refrigerator space, the Allies must rely chiefly on America for the meat with which to maintain the morale of civilians and to send the soldiers 'Over the Top'.

FOUNDATION OF FACTS ON WHICH TO BUILD

From the conditions outlined, the maintenance of standard breeds of pure-bred livestock in the United States and the general improvement in meat animals seems desirable if this country is to retain its export trade, now so highly developed. Well-bred stock does not, however, necessarily imply highly finished animals. *General facts and figures are, it is recognized, capable of varied interpretations; but the Food Administration believes a study of international meat conditions will*

give American producers a broad foundation on which to plan and build for the future.

Banks and cattle loan companies must realize that they have an important obligation to fulfill in the international meat situation. Breeding and fattening operations must be both encouraged and made possible through financial assistance if American herds are to be maintained. *In view of the facts presented, such maintenance is an imperative agricultural and military necessity.*

APPENDIX C

ANALYSIS OF COSTS OF PRODUCTION OF CALVES UNDER RANGE CONDITIONS IN 1921-22

The following estimate is an attempt to show what were the absolutely unavoidable costs incurred by the producer of calves in the range states during the difficult period following the collapse of prices in 1920. In our analysis we have proceeded on the assumption that the land requirements are leased rather than owned. One basis, as will be observed, proceeds on the basis of a $30 valuation per cow. As a matter of fact, this was about the actual minimum indebtedness on herds at that time and, we believe, considerably less than the indebtedness on the majority. The other valuation assumed on a cow was $40 per head. This can be justified from either of two standpoints. One is that it more nearly represented the indebtedness on which the majority were paying interest, and secondly, that it represented the former theoretical idea as to the valuation of a cow. It was assumed for a long time that a cow was worth on the range the value of two calves. Therefore, with a $20 per head average for calves at this time a cow was worth $40.

The items going to make up the total costs of production on the two bases are as follows:

Items of Expense	$30 Cow	$40 Cow
Interest on cow at the rate of 8 per cent.....	$ 2.40	$ 3.20
Death loss—3 per cent	.90	1.20
Depreciation on cow (assuming that in eight years a cow depreciates 50 per cent in value from a breeding standpoint to half value on the market as a canner)	1.88	2.50
Labor (per cow per annum)	1.00	1.00
Grass, on minimum rental basis 50 cents per month	6.00	6.00
Taxes on cow	.20	.20
Salt, fencing, windmill expense, and so on.....	.75	.75
Winter feed of cottoncake, which is a necessity in this instance on account of the low rental cost assessed in carrying the cows	2.00	2.00
Cost of vaccine, dehorning, and so on	.35	.35
Bull expense prorated per cow and including all the items of expense assessed on the cows	2.00	2.00
Total	$17.48	$19.20
Assuming an average calf crop of 66 2/3 per cent which is fully normal or above, the cost of production based on the number of calves actually dropped was per calf	$26.22	$28.80

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